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Human
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Agriculture
Handbook
Number 8-12

REFERENCE

Composition of Foods:

Nut and Seed Products

- Raw
- Processed
- Prepared

The Human Nutrition Information Service has recently been reorganized. The former Consumer Nutrition Division, which prepared this report, is now the Nutrition Monitoring Division and is now comprised of three branches: Food Consumption Research Branch, Nutrient Data Research Branch, and Survey Statistics Branch.

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By Nutrition Monitoring Division

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FOREWORD

Agriculture Handbook No. 8 represents a traditional function of the U.S. Department of Agriculture. The development of the basic food composition tables used in the United States began more than 80 years ago. Data on the nutritive value of foods were first compiled and evaluated in the Department by W. O. Atwater in the 1890's. This nutrition pioneer organized and became the first director of the Office of Experiment Stations in the USDA. In 1896, the now classic USDA Bulletin No. 28, "The Chemical Composition of American Food Materials," by W. O. Atwater and C. D. Woods was published. This document was the first in a long series of food composition tables that have been issued by the Department.

The scope of succeeding tables has been expanded with the discovery of the presence and role of vitamins, minerals, and other dietary essentials in foods. Values from these tables have been used in many other compilations, both in this country and abroad. Nutritionists and scientists working in health-related fields depend on these composition data. Increasing emphasis on food and nutrition in national policies and programs has accelerated the need for comprehensive, up-to-date tabulations of the nutrient content of foods. USDA is continuing to expand and improve these food data.

This publication is a major revision of the 1963 edition of USDA Agriculture Handbook No. 8, "Composition of Foods... Raw, processed, prepared," currently a basic source of food composition data in this country. Dr. Atwater stated in Bulletin No. 28, "This table is intended to replace previous ones and to serve as a standard reference until it shall in its turn be replaced by a larger and more complete compilation." This revision of Agriculture Handbook No. 8 will, in its turn, also be replaced. The task of deriving representative nutritive values of foods is a historical responsibility of USDA. This task is never ending and is essential in providing more complete knowledge so that we can use our food resources wisely.



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AGRICULTURE HANDBOOK NO. 8 SERIES

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PREFACE

Revising the major nutrient tables issued by the U.S. Department of Agriculture is necessary to provide current nutrient information on foods. This revision of the 1963 edition of Agriculture Handbook No. 8 is being issued in sections to expedite the release of data to the public. Each section contains a table of nutrient data for a major food group. The entire series will cover a wide range of food products.

To facilitate continuous, rapid updating, each section of the handbook is being prepared in looseleaf form. Each page in the table contains the nutrient profile of a single food item, given on the 100-gram food basis, in two common measures, and in the edible portion of 1 pound (453.6 grams) as purchased. This format permits a concise presentation of the data and comparison of values from one unit of measure to another.

The scope of the nutrient listing has been enlarged. Values are provided for refuse, energy, proximate composition (water, protein, fat, carbohydrate, and ash), 9 mineral elements (calcium, iron, magnesium, phosphorus, potassium, sodium, zinc, copper, and manganese), 9 vitamins (ascorbic acid, thiamin, riboflavin, niacin, pantothenic acid, vitamin B₆, folacin, vitamin B₁₂, and vitamin A), individual fatty acids, total saturated, monounsaturated, and polyunsaturated fatty acids, cholesterol, total phytosterols, and 18 amino acids.

The nutritive values contained in the handbook reflect the increasing information available on nutrients and food products. Our goal is for the revised and enlarged compilation of data to meet the requirements for reliable food composition values, which are basic to nutritional and dietary evaluation.

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Composition of Foods:

Nut and Seed Products

Raw • Processed • Prepared

This is the twelfth in a series of publications designed to revise and expand the food composition values published in the 1963 edition of Agriculture Handbook No. 8, "Composition of Foods...Raw, processed, prepared" (38).¹ This section of the revised handbook serves as a basic reference for data on nutrients in nut and seed products. This table was prepared with computer assistance, using the facilities of the Nutrient Data Bank (NDB) (30).

Nutrient data on many new nut and seed products were obtained since 1973 from analyses conducted for nutritional labeling. In this table, data on nut and seed products have been expanded from 38 items given in the 1963 edition of the handbook to 117 items presented in this revision. If a nut or seed item given in the 1963 edition of the handbook is no longer marketed commercially, it was omitted from the table. The nutrient values presented in this revision supersede values for those foods as given in previous publications of the Department.

SOURCES OF DATA

Nutrient data on nut and seed products were compiled from published and unpublished sources. Scientific and technical literature from the United States and other countries were used as published sources. Unpublished sources were industry, government agencies, universities, and studies conducted under grant or contract with the Human Nutrition Information Service.

EXPLANATION OF TABLE

Format

Data on nut and seed products are divided into two major sections: Nuts and Seeds. Within each section, items are arranged alphabetically. A guide containing the food item name, corresponding item number(s) in the 1963 edition, NDB number, and page number precedes the table.

A five-digit NDB number in the lower right hand corner of the table is used for computer access to the data in the NDB, and also refers to the food item on machine-readable tapes of the data. NDB numbers are not consecutive. The first two digits designate the section or major food group for which the publication is issued, and the last three digits indicate the specific food.

Each page in the table is dated by year of preparation. When the table is updated or expanded, new pages will be issued with instructions for insertion. The abbreviations used in the tables are defined in the appendix.

Weights and Measures

Data are given per 100 grams of edible portion in column B. When available, the amounts in the edible portion of two household measures and/or market units are given in columns E and F. The amount in the edible portion of one pound (453.6 grams) of food as purchased is given in column G. Metric system equivalents for these measures are given in the appendix. U.S. Department of Agriculture Handbook No. 456 (AH-456) was the basic reference for obtaining weights and measures (1). Other sources of information were industry and unpublished data. Where information on a specific food was not available, values for a similar form of the food were used.

Values in column C are the sample standard errors, which are given to 3 decimal places. Column D contains the number of samples on which the values in columns B and C are based. The standard error could not be calculated when there was only one sample. For some foods and nutrients, means are given without the

¹Underlined numbers in parentheses refer to Literature Cited, p. 8.

standard error and number of samples. These values were calculated from another form of the food, from a similar food, or were based on a recipe. For a few foods and nutrients, new data have not become available since the last edition of the handbook. In these cases, values from the 1963 edition of the handbook and other publications of the Division are repeated for the user's convenience (31, 38).

The number of decimal places for some nutrient data differs from that of the 1963 handbook. Decimal places shown are based on the number used in the bulk of the analytical data collected. Appropriate relationships among the different weights of a food item were preserved by use of the same number of decimal places for the 100-gram basis and for data in other units of measure. The number of decimal places does not necessarily reflect the accuracy of the data.

Values in columns E, F, and G were calculated from the data in column B on the 100-gram basis given to 3 decimal places. Because of rounding, a nutrient value may appear as a zero in the 100-gram column, even though a value greater than zero appears in columns E, F, or G. Measures and weights used to calculate the nutrient values appear above columns E and F. Wide ranges in values for the weight of a given measure or unit of a food product are often observed on data from different sources. In AH-456 a detailed discussion of weight and volume relationships is given (1).

Weights given above columns E, F, and G do not include the weight of the inedible material for those foods containing refuse. Amounts and description of material removed during preparation of the food are shown above column G after refuse. These amounts are expressed as the percentage of the total weight as purchased, and are used in computing the yield of the pound as purchased or the weight of other household units containing inedible refuse. For example, dried, unblanched almonds, as ordinarily purchased, contain 60 percent refuse as shells. The weight in grams of the edible portion of 1 pound would be 0.40×453.6 grams or 181.4 grams. To

obtain the nutrient values for 1 pound of almonds as purchased, the values for 100 grams edible portion (column B) are multiplied by 1.814.

Blanks indicate that no data were available for that nutrient in the particular food.

Nutrients

Proximate components.--Values for proximate components are rounded to 2 decimal places to reflect the limit of accuracy of the analytical data. Data for water (moisture) are given in the table as grams in the edible portion of the food. Food energy is expressed in terms of both kilocalories and kilojoules. The data are for physiological energy values and represent the gross energy value remaining after losses in digestion and metabolism have been deducted.

Specific calorie factors used for nut and seed products are given in the appendix and are based on the Atwater system for determining energy values. Details of the derivation of these factors are outlined in Agriculture Handbook No. 74 (28). Factors for nut and seed products containing more than one source of calories were based on the major calorie source. Kilocalories were converted into kilojoules by use of the factor 4.184.

Protein.--Values for protein were calculated from determinations of the total nitrogen (N) content in the food by multiplying the total nitrogen value by the conversion factors recommended by Jones (20). Nitrogen-to-protein conversion factors for nut and seed products are given in the appendix. The specific factor applied to each nut and seed item is shown in the stub of the table of nutrient data following protein. When a food item from this food group contained more than one source of protein, nitrogen-to-protein conversion factors were based upon the major protein source.

Carbohydrates.--The total carbohydrate value is the difference between 100 and the sum of the percentages of water, protein, fat, and ash. It should also be noted that the total carbohydrate value includes fiber. Values for crude

fiber appear in the table. Values for insoluble dietary fiber as determined by the neutral detergent fiber method (4) and soluble fiber determined as pectin, appear in a footnote when this information was available.

Minerals.--Data on the content of nine mineral elements are included in the table. Zinc, copper, and manganese have been added to the minerals reported in the 1963 handbook. Most minerals were determined by atomic absorption spectroscopy. Phosphorus was determined colorimetrically. Sodium and potassium were determined by flame photometry.

Analytical mineral values represent the total amount present in the food and include those amounts added to the product in preparation for the retail market. The values do not necessarily represent the amount of the mineral element available to the body.

Oxalic acid can combine with calcium and magnesium to form highly insoluble compounds which can make these minerals unavailable to the body. Most foods, however, do not contain enough oxalic acid to combine with a significant amount of calcium or magnesium from the same food or from another source. Foods--such as whole sesame seeds--that contain high amounts of oxalic acid usually contain sufficient calcium or magnesium to bind all the oxalic acid in that food and not interfere with the calcium and magnesium availability of other foods in the diet.

Much of the phosphorus present in nuts and legumes occurs as phytic acid. This is a phosphoric acid ester of inositol which may combine with some of the calcium, magnesium, iron, and zinc to form insoluble compounds that pass through the body without being absorbed.

Vitamins.--Ascorbic acid values are given as total ascorbic acid. Thiamin was determined chemically by the thiochrome procedure or by microbiological methods. Fluorometric or microbiological methods were used to measure riboflavin.

Niacin data were obtained both chemically and microbiologically. Values are for preformed niacin only and do not include the niacin that could be

contributed by tryptophan, a niacin precursor.

Pantothenic acid was determined microbiologically. Vitamin B₆ was determined by microbiological and chromatographic methods. The folacin values reported in the table represent total folate after releasing bound folacin by enzymatic treatment. Analytical values shown for folacin were determined by the use of conjugase, ascorbic acid to protect from oxidation, and Lactobacillus casei as the test organism.

Vitamin B₁₂ is not present in plant foods. In the table, vitamin B₁₂ values for nut and seed products are shown as zero.

Nut and seed products, like other plant materials, do not contain vitamin A (retinol); but they do contain precursors of the vitamin. The vitamin A activity of nut and seed products is based on the amounts of the various provitamin A carotenoids that are present. Vitamin A is expressed both as international units (IU) and as retinol equivalents (RE). One RE is equivalent to 6 mcg beta-carotene or 10 IU vitamin A activity from beta-carotene.

Vitamin E was determined by colorimetric and gas chromatographic methods. When available, vitamin E values are reported in footnotes as milligrams per 100 g of alpha-tocopherol, the most active form of vitamin E.

Lipids.--In the table, fatty acids are identified by number. The first number refers to the number of carbon atoms and the second refers to the double bonds in the chain. Trivial or scientific names for the fatty acids were not used since the values of the unsaturated acids include positional and geometric isomers.

Only data obtained by gas-liquid chromatographic analyses were used. The values shown are for the actual quantity of each fatty acid in the food and do not represent fatty acid triglycerides. Most of the fatty acids were analyzed as their methyl esters. These data were converted to grams of fatty acids per 100 grams of total lipid by using the conversion factors given in the appendix. Details of the derivation of lipid conversion factors have been published (40).

Values for total saturated, monounsaturated, and polyunsaturated fatty acids include fatty acids not reported in the table for many foods; therefore, they may exceed the sum of the individual fatty acids listed. If the actual sum of the individual fatty acids exceeds the stated value for the total saturated, monounsaturated, or polyunsaturated fatty acids, the difference is due to rounding.

Plant sterol values were obtained by either colorimetric or gas chromatographic procedures. Since cholesterol is not found in plant products, zero values for cholesterol are shown in the table.

Amino Acids.--The data represent results obtained primarily with ion-exchange chromatographic methods. Some tryptophan values were determined by selected chemical methods such as those of Spies and Chambers (35). For the determination of methionine and cystine, preference was given to those studies using performic acid oxidation prior to acid hydrolysis.

In cooperation with the laboratory of the Richard B. Russell Center of the U.S. Department of Agriculture, protein hydrolysis studies were conducted on selected nut samples (23, 26, 27). From these studies, correction factors for hydrolysis were developed and applied to amino acid values for butternuts, Chinese and European chestnuts, hickory-nuts, pecans, and both black and English (Persian) walnuts.

Analytical data on the amino acid content of the nut and seed products were converted to the basis of grams of amino acid per gram of nitrogen and then summarized to obtain amino acid patterns. A single amino acid pattern was developed for each nut and seed.

Amino acids in grams per 100 grams of nut and seed products were obtained by multiplying the nitrogen content (grams of nitrogen per 100 grams) of a specified nut or seed product by the amino acid pattern (grams of amino acid per gram of nitrogen). Conversely, when the amino acid values given in the table are divided by the nitrogen content of a specific nut or seed product, the amino acid values in grams per gram of nitrogen can be calculated.

The number of samples upon which the amino acid pattern for a nut or seed is based is given the first time the food item appears in the table. Amino acid values for nut combinations or recipes were calculated from data for individual components.

NOTES ON NUT AND SEED PRODUCTS

Data presented in the nut and seed sections are alphabetized by common name. The raw form is shown first, when available, followed by the dried forms and then the processed forms. The scientific name of the nut or seed is given below the common name (at the top of the page) the first time the nut or seed name appears. U.S. Department of Agriculture Handbook No. 505 (36) was used as the basic reference for scientific names and preferred common names with additional information provided by Terrell.² Synonyms for common names are listed alphabetically in the Guide to Nut and Seed Products.

Different forms of nuts and seeds usually were not of a common sample origin. Data were obtained from many sources and may represent different growing years, growing areas, cultivars, processing techniques, lengths and conditions of storage, laboratories, and possibly different methods of analysis. Therefore, in data for different forms of nuts and seeds, apparent nutritional differences are not necessarily due to the effects of processing or preparation methods. The above factors, together with natural variability, may lead to an apparently higher nutrient content for the processed form of a nut or seed than for the unprocessed form.

Nuts.--Several tree nuts which are grown in the United States and are commercially important in the food supply are: Almonds, black walnuts, English walnuts, filberts (hazelnuts), macadamia

²Terrell, E. E. 1983. Plant Exploration and Taxonomy Laboratory. Agricultural Research Service, U.S. Dept. of Agr., Beltsville, MD. Personal Communication.

nuts, pecans, pinyons, and pistachio nuts. Additional supplies of almonds, filberts (hazelnuts), pecans, and pistachio nuts are imported. Most coconuts consumed in the United States are imported, but in some tropical areas, coconuts are readily available from the coconut palm tree. Other nuts must be imported, such as Brazilnuts, cashew nuts, European chestnuts, ginkgo nuts, pignolias, and pilinuts-canarytree.

Some nuts are gathered by the consumer, either from the woodlands or from trees used to landscape property. Nuts in this category are acorns, beechnuts, butternuts, Chinese and Japanese chestnuts, and hickorynuts.

Although, botanically, peanuts and soybeans are legumes and not tree nuts, many people group peanuts and roasted and toasted soybeans with nuts. The nutritive values of peanuts, peanut butter, defatted peanut flour, and roasted and toasted soybeans are included in the Nut and Seed Products Section and will also appear in the Legume and Legume Products Section.

Nearly all nuts must be dried or cured prior to being consumed. Drying nuts to a low moisture content--either by sundrying or by artificial drying--not only prevents molding but also permits the protein, fat, and carbohydrate content to be more stable (42). Although coconuts can be eaten raw, directly from the tree, harvested green coconuts are partially dried or seasoned in the field (15). Generally, the table shows the dried form of nuts rather than the raw form.

Today, over half the world's supply of almonds (Prunus dulcis) is grown in the Sacramento and San Joaquin areas of the Central Valley of California (3). The market forms available include in-shell almonds, shelled almonds in many unblanched and blanched forms, almond paste made from ground unblanched or blanched almonds blended with sugar, almond butter made from ground dry roasted almonds blended with salt and a stabilizer, almond meal, and almond powder (3, 10, 25).

English or Persian walnuts (Juglans regia), which are often called just "walnuts," originated in Persia, hence, they were first called Persian

walnuts (42). After Persian walnuts were introduced to England and then brought to America they were called English walnuts (8, 13, 14, 42). Today, California is the center of commercial production in the United States (13, 37).

Black walnuts (Juglans nigra), are native to North America (8). These walnuts, which are very hard to crack, are harvested wild from woodlands and from cultivated trees (8, 42).

Most Brazilnuts (Bertholletia excelsa) come from trees that grow wild in the dense tropical jungles of the Brazilian states and territories of the Amazon Basin, as well as from a few commercial plantations (6, 42). Both in-shell and shelled Brazilnuts are marketed.

Cashew nuts (Anacardium occidentale), which are native to Brazil, are cultivated in many tropical countries (17). The largest proportion of cashew nuts comes from India and includes a large part of the African crop processed in India before exporting (8). Before the cashew nuts are eaten, the corrosive liquid between the shells must be removed by some form of heat (8, 42), generally roasting. Some cashew nuts, which are very lightly roasted and appear white, are mistakenly called raw.

Filbert and hazelnut are names used interchangeably for species of the genus Corylus (42). Native American Corylus species in the United States, many of which grow wild, are called hazelnuts; while the species derived from cultivated European species of Corylus are called filberts (42). Two important commercial cultivars are the European filbert (Corylus avellana) and the giant filbert (Corylus maxima) (42). Filberts are grown commercially in Oregon and Washington, but are also imported from Turkey, Italy, and Spain to meet the demand for this nut (42).

Macadamia nuts (Macadamia integrifolia, M. tetraphylla), native to Australia, are grown in Hawaii and California (7). Oil roasted, salted macadamia nuts are readily available throughout the United States.

Pecans (Carya illinoensis) are native to temperate North America (5). The leading producers of pecans are

Georgia and Texas, but pecans are also grown in several other states including Arizona, the Carolinas, Florida, and New Mexico (5). Mexico, Brazil, Australia, South Africa, and Israel also produce pecans (24). Dry roasted and oil roasted mixed nuts also contain pecans.

Pistachio nuts (*Pistacia vera*) are cultivated in Iran, Turkey, Syria, Greece, Italy, and the United States (8, 11). In California, the Kerman cultivar of pistachio nuts is grown (11). Natural ivory-shelled and red-dyed pistachio nuts are available (11).

Most coconuts (*Cocos nucifera*) eaten in the United States are consumed as dried (desiccated) coconut, a form of coconut meat that has been shredded, disintegrated, and then thoroughly dried in hot air driers (15). Unsweetened and sweetened coconut comes in many forms, called cuts.³ The two types of coconut cuts most often found in retail markets are flaked and shredded desiccated sweetened coconut (9, 12). Another type of desiccated coconut is toasted coconut which may be either unsweetened or sweetened (33). Creamed coconut, used in fillings for cookies and in rotary cookie dough, is made from unsweetened desiccated coconut which is milled to free the fat from the fiber and then whipped to a shortening-like consistency (41).

Dried ginkgo nuts (*Ginkgo biloba*) resemble almonds but are whiter, fuller, and rounder (16). Canned ginkgo nuts imported from Japan are readily available in Oriental grocery stores in the United States.

Pilinuts-canarytree (*Canarium ovatum*), are imported from the Philippines. In the United States, markets featuring Philippine foods stock candied pilinuts.

One pine nut species, pinyon (*Pinus edulis*), is an important source of food and revenue for native Americans in the Southwest. Very little recent information on the nutrient content of pinyons is available, except for the unpublished data of Lanner (21) and Weber (39). Although pignolia trees (*Pinus pinea*) are

found in the southern part of the United States,⁴ most pignolia nuts are imported from Italy, Spain, Portugal, and Mexico (42). The flavor of pignolias is very pungent, resembling turpentine, so these nuts are generally used only as an ingredient of cakes and puddings (42).

Acorns (*Quercus* spp.) are eaten raw, dried, or roasted in many parts of the world. American pioneers and native Americans ground acorns into meal to make bread or to thicken soups (29). Most acorns contain potentially toxic tannins which must be leached out of the acorns before they are eaten. The literature contains very little recent information on the nutritive value of acorns. Weber, however, has made unpublished data available on the nutrient content of dried acorn kernels and full-fat acorn flour both of which are used by the White Mountain Apache Indians (39).

Although beechnut trees are found in many wooded areas, very few produce beechnuts (*Fagus* spp.) that have a sweet flavor. Beechnuts from these trees are small and are difficult to gather for food because wildlife feed on them (29).

Almost all of the trees of the American chestnut (*Castanea dentata*) have been destroyed by fungus blight. Today, Chinese chestnut (*Castanea mollissima*) trees, which are blight resistant, are sold in place of the American chestnut for yard and orchard culture (19). Some Japanese chestnuts (*Castanea crenata*) are imported from Japan and some are grown in the United States; although these chestnuts are not as well adapted to the North American climate as are the Chinese chestnuts (19). European or Italian chestnuts (*Castanea sativa*) are available in markets around the holiday season and are also sold roasted on street corners of some cities.

Hickorynuts, which are native to the woodlands of the United States, belong to the *Carya* species (42). Shagbark

³Ruehrmund, M.E. 1983. General Foods Corp., Dover, DE. Personal Communication.

⁴Woodroof, J.G. 1983. Dept. of Food Science, Georgia Agricultural Experiment Station, Experiment, GA. Personal Communication.

hickorynuts (*Carya ovata*) are moderate in size and thin shelled, while shellbark hickorynuts (*Carya laciniosa*) are larger nuts with a thick shell (42).

Butternuts are another species of *Juglans* (*Juglans cinera*). The trees, which are native to the limestone areas of Eastern United States and the adjacent Canadian area, bear elliptical nuts with deep corrugated shells (17).

Formulated wheat-based nuts can be used alone or substituted for tree nuts in many food products and as snacks. Unflavored and flavored wheat-based nut substitutes are available in many sizes and shapes.

Seeds.--Because seeds have a high fat content, they are grown primarily for their edible oils. Some seeds are eaten with very little home or commercial processing. Like nuts, some of the seeds are commercially important and can be easily purchased in retail or wholesale markets. Other seeds are available only to those having access to the growing plants or trees.

Both pumpkin and squash seeds (*Cucurbita* spp.) are consumed in the United States. Dried pumpkin and squash seeds and roasted pumpkin seeds are available in retail markets. Whole squash seeds are eaten roasted and salted by the Navajo Indians (39).

Safflower seed (*Carthamus tinctorius*) is grown in the United States as well as in Egypt, India, and the Orient (17). Although there has been some interest in using safflower seed meal and flour, safflower is cultivated primarily for the oil in the seeds.

During the Civil War, cottonseed (*Gossypium* spp.) was parched and ground as a coffee substitute in the South (16). Today, glandless cottonseed products such as roasted kernels, flour, and meal are used as ingredients in a variety of products (34).

Sesame seed (*Sesamum indicum*) is native to East Africa and is grown in China, India, Ethiopia, Sudan, Nicaragua, Mexico, Guatemala, and the United States (8). A paste form of sesame butter, is made from

the whole seed, while tahini, another type of sesame butter, is made from the kernel.

In the summer, watermelon seeds (*Citrullus lanatus*) are readily available from raw watermelons, but are probably seldom eaten from this source. Dried watermelon seeds, imported from Thailand and Taiwan, can be found in Oriental food stores in the United States.

Breadfruit trees (*Artocarpus altilis*) are found throughout the Tropics. Although most breadfruit trees bear fruit that is seedless, some cultivars contain seeds. In the seeded cultivars, the fruit pulp is almost nonexistent and the breadfruit seeds take up almost all the space inside the fruit (8).

In the American Tropics and Mexico, the breadnuttree (*Brosimum alicastrum*) produces yellow fruit with single seeds, also called ramons (18, 32). Breadnuttree seeds are generally eaten boiled or roasted (18).

One of the species of *Sisymbrium* (*Sisymbrium* spp.) is also known as tumble mustard. Native Americans of the Navajo nation use these dry ground seeds, which they call "k'ostse," as an ingredient of cornbread (39).

Small-seeded plants that differ botanically from cereals, but that are cultivated like cereals in fields and ground into flour to make bread and similar products, are called pseudo-cereals (8). One of these pseudo-cereals is chia seed (*Salvia* spp.) which is native to Mexico (8).

The sacred lotus (*Nelumbo* spp.) is an aquatic plant found in China and India (8). In the United States, Oriental grocery stores stock the dried, whole lotus seed which is imported from China.

Cultivars of the confectionery type of sunflower seeds (*Helianthus annuus*) are generally black with white stripes and are larger than oilseed type cultivars (2). Whole sunflower seeds, sunflower kernels, and sunflower butter are sold. There is also a small market in the United States for defatted sunflower seed flour (22).

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APPENDIX

List of Abbreviations

approx	approximately
c	cup
diam	diameter
fl oz	fluid ounce
g	gram
in	inch
IU	international unit
kcal	kilocalorie
kJ	kilojoule
lb	pound
liq	liquid
mcg	microgram
mg	milligram
N	nitrogen
NDB	Nutrient Data Bank
No.	number
oz	ounce
pkg	package
RE	retinol equivalent
tbsp	tablespoonful
tsp	teaspoonful

Metric System Equivalents for Units of Measure

Unit of measure

Metric system equivalents

Volume

1 gallon (4 quarts)	3.786 liters; 3,786 milliliters
1 quart (4 cups)	0.946 liter; 946 milliliters
1 cup (8 fluid ounces; 1/2 pint; 16 tablespoons)	237 milliliters
2 tablespoons (1 fluid ounce)	30 milliliters
1 tablespoon (3 teaspoons)	15 milliliters

Weight

1 pound (16 ounces)	453.6 grams
1 ounce	28.4 grams
3-1/2 ounces	100 grams

Specific Factors for Calculating Energy Values

<u>Food</u>	<u>Protein (kcal/g)</u>	<u>Fat (kcal/g)</u>	<u>Carbohydrate (kcal/g)</u>
Mixed nuts ¹	3.47	8.37	4.07
Nuts, formulated, wheat-based..	3.59	8.37	3.78
Nuts and seeds.....	3.47	8.37	4.07
Peanuts.....	3.47	8.37	4.07
Soybeans.....	3.47	8.37	4.07

¹With and without peanuts.

Nitrogen-to-Protein Conversion Factors

<u>Food</u>	<u>Conversion factor</u>
Almonds	5.18
Brazilnuts	5.46
Mixed nuts ¹	5.30
Nuts, formulated, wheat-based	5.80
Other nuts and seeds	5.30
Peanuts	5.46
Soybeans	5.71

¹With and without peanuts.

Conversion Factors for Fatty Acids of Nut and Seed Products¹

	<u>Conversion factor</u>
Nuts:	
Acorns	0.956
Almonds .....	.954
Beechnuts .....	.954
Brazilnuts .....	.956
Butternuts .....	.956
Cashew nuts .....	.956
Chestnuts, Chinese .....	.930
Chestnuts, European .....	.928
Chestnuts, Japanese ² .....	.930
Coconuts:	
Fatty acids:	
6:0 .....	.897
8:0 .....	.916
10:0 .....	.929
12:0 .....	.939
14:0 .....	.947
16:0 .....	.953
18:0 .....	.958
18:1 .....	.958
18:2 .....	.957
Filberts or hazelnuts .....	.953
Formulated, wheat-based .....	.956
Ginkgo nuts .....	.930
Hickorynuts .....	.956
Macadamia nuts .....	.956
Mixed nuts .....	.956
Peanuts .....	.951
Peanut butter .....	.951
Peanut flour .....	.785
Pecans .....	.951
Pecan flour .....	.785
Pilinuts-canarytree, dried .....	.956
Pine nuts ³ .....	.956
Pistachio nuts .....	.953
Soybeans .....	.956
Walnuts, Black .....	.952
Walnuts, English or Persian .....	.952

Conversion factor

Seeds:

Breadfruit seeds ⁴ .....	.930
Breadnuttree seeds .....	.930
Chia seeds .....	.956
Cottonseeds .....	.956
Cottonseed flour, partially defatted .....	.916
Cottonseed flour, lowfat .....	.785
Cottonseed meal, partially defatted .....	.905
Lotus seeds .....	.930
Pumpkin and squash seeds .....	.956
Safflower seeds .....	.956
Safflower meal, partially defatted .....	.863
Sesame seeds .....	.956
Sesame flour, high-fat .....	.956
Sesame flour, partially defatted .....	.938
Sesame flour, lowfat .....	.785
Sisymbrium sp., seeds .....	.930
Sunflower seeds .....	.956
Sunflower seed flour, partially defatted ....	.785
Watermelon seed kernels .....	.956

¹Factors are based on the best available information; revision of some factors may be required as better data become available.

²From Chinese chestnuts.

³Includes pignolia and pinyon.

⁴From breadnuttree seeds.

Guide to Nut and Seed Products

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	NDB No. Page

Nuts:

Acorns:

Raw	12058	21
Dried	12059	22
Acorn flour, full-fat	12060	23

Almonds:

Dried:

Unblanched	8	12061	24
Blanched	12062	25	

Dry roasted, unblanched	12063	26
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Oil roasted:

Unblanched	9	12065	27
Blanched	12066	28	

Toasted, unblanched	12067	29
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Almond butter:

Plain	12195	30
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Honey and cinnamon	12196	31
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Almond meal, partially defatted	10	12197	32
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Almond paste	12071	33
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Almond powder:			
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Full-fat	12072	34
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Partially defatted	12073	35
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Bean of Malacca. [See Cashew nuts (NDB Nos. 12085, 12086, 12088).]			
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Beechnuts, dried	207	12077	36
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Brazilnuts, dried, unblanched	443	12078	37
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Bushnuts. [See Macadamia nuts (NDB Nos. 12131, 12133).]			
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Butternuts, dried	511	12084	38
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Cashew nuts:			
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Dry roasted	12085	39
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Oil roasted	628	12086	40
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Cashew butter, plain	12088	41
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Chestnuts:			
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Chinese:			
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Raw	12093	42
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Dried	12094	43
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Boiled and steamed	12095	44
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Roasted	12096	45
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European:			
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Raw:			
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Unpeeled	677	12097	46
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Peeled	12098	47
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Dried:			
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Unpeeled	678	12099	48
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Peeled	12100	49
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Boiled and steamed	12101	50
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Roasted	12167	51
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	AH-8 item (1963)	AH-8-12 NDB No.	AH-8-12 Page
Japanese:			
Raw	12202	52	
Dried	12175	53	
Boiled and steamed	12203	54	
Roasted	12204	55	
Coconut meat:			
Raw 789	12104	56	
Dried (desiccated):			
Creamed	12177	57	
Unsweetened 790	12108	58	
Sweetened:			
Flaked:			
Canned	12110	59	
Packaged	12109	60	
Shredded 791	12179	61	
Toasted	12114	62	
Coconut cream (liquid expressed from grated coconut meat):			
Raw 788	12115	63	
Canned	12116	64	
Coconut milk (liquid expressed from mixture of grated coconut meat and water):			
Raw 792	12117	65	
Canned	12118	66	
Frozen	12176	67	
Coconut water (liquid from coconuts) 793	12119	68	
Colorado pinyon pines. [See Pine nuts, Pinyon (NDB No. 12149).]			
Creamnuts. [See Brazilnuts (NDB No. 12078).]			
Filberts or hazelnuts:			
Dried:			
Unblanched 1008	12120	69	
Blanched	12121	70	
Dry roasted, unblanched	12122	71	
Oil roasted, unblanched	12123	72	
Formulated, wheat-based:			
Unflavored	12140	73	
Flavored:			
Macadamia flavor	12199	74	
All other flavors	12200	75	
Ginkgo nuts:			
Raw	12127	76	
Dried	12128	77	
Canned	12129	78	
Goober peas. [See Peanuts (NDB Nos. 12180, 12181, 12190, 12192).]			
Groundnuts. [See Peanuts (NDB Nos. 12180, 12181, 12190, 12192).]			

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Hazelnuts. [See Filberts or hazelnuts (NDB Nos. 12120-12123).]		
Heart-nuts. [See Cashew nuts (NDB Nos. 12085, 12086, 12088).]		
Hickorynuts, dried	1133	12130 79
Italian chestnuts. [See Chestnuts, European (NDB Nos. 12097-12101, 12167).]		
Italian stone pines. [See Pine nuts, Pignolia (NDB No. 12147).]		
Long walnuts. [See Butternuts (NDB No. 12084).]		
Macadamia nuts:		
Dried	1297	12131 80
Oil roasted		12133 81
Mahogany apples. [See Cashew nuts (NDB Nos. 12085, 12086, 12088).]		
Mixed nuts:		
Dry roasted, with peanuts		12135 82
Oil roasted:		
With peanuts		12137 83
Without peanuts		12138 84
Nut pines. [See Pine nuts, Pinyon (NDB No. 12149).]		
Paranuts. [See Brazilnuts (NDB No. 12078).]		
Peanut kernels:		
Dried	1493	12180 85
Oil roasted	1496	12181 86
Peanut butter	1497-1499	12192 87
Peanut flour, defatted	1501	12190 88
Pecans:		
Dried	1536	12142 89
Dry roasted		12143 90
Oil roasted		12144 91
Pecan flour		12168 92
Pignolis. [See Pine nuts, Pignolia (NDB No. 12147).]		
Pignolias. [See Pine nuts, Pignolia (NDB No. 12147).]		
Pignons. [See Pine nuts, Pignolia (NDB No. 12147).]		
Pilinuts-canarytree, dried	1609	12145 93
Pine nuts:		
Pignolia, dried	1624	12147 94
Pinyon, dried	1625	12149 95
Pinocchios. [See Pine nuts, Pignolia (NDB No. 12147).]		
Pinon pines. [See Pine nuts, Pinyon (NDB No. 12149).]		
Pinons. [See Pine nuts, Pinyon (NDB No. 12149).]		
Pinyon pines. [See Pine nuts, Pinyon (NDB No. 12149).]		
Pinyons. [See Pine nuts, Pinyon (NDB No. 12149).]		
Pistache nuts. [See Pistachio nuts (NDB Nos. 12151, 12152).]		
Pistachia nuts. [See Pistachio nuts (NDB Nos. 12151, 12152).]		

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Pistachio nuts:		
Dried	1626	12151 96
Dry roasted		12152 97
Queensland nuts. [See Macadamia nuts (NDB Nos. 12131, 12133).]		
Soybean kernels, roasted and toasted		12139 98
Stone pines. [See Pine nuts, Pignolia (NDB No. 12147).]		
Sweet chestnuts. [See Chestnuts, European (NDB Nos. 12097-12101, 12167).]		
Walnuts:		
Black, dried	2420	12154 99
English or Persian, dried	2421	12155 100
Seeds:		
Benniseeds. [See Sesame seeds (NDB Nos. 12023, 12024, 12029, 12032-12034, 12166, 12169-12171, 12198, 12201).]		
Breadfruit seeds:		
Raw		12001 101
Boiled		12003 102
Roasted		12158 103
Breadnuttree seeds:		
Raw		12004 104
Dried		12005 105
Chia seeds, dried		12006 106
Cottonseed kernels, roasted		12160 107
Cottonseed flour:		
Partially defatted	895	12007 108
Lowfat		12008 109
Cottonseed meal, partially defatted		12011 110
Gingelly. [See Sesame seeds (NDB Nos. 12023, 12024, 12029, 12032, 12034, 12166, 12169-12171, 12198, 12201).]		
Lotus seeds:		
Raw		12205 111
Dried		12013 112
Pumpkin and squash seeds, whole, roasted		12163 113
Pumpkin and squash seed kernels:		
Dried	1833	12014 114
Roasted		12016 115
Ramons. [See Breadnuttree seeds (NDB Nos. 12004, 12005).]		
Safflower seed kernels, dried	1927	12021 116
Safflower seed meal, partially defatted	1928	12022 117
Sesame seeds:		
Whole:		
Dried	2032	12023 118
Roasted and toasted		12024 119
Sesame seed kernels:		
Dried	2033	12201 120
Toasted		12029 121
Sesame butter:		
Paste		12169 122

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Tahini:		
From raw and stone ground kernels	12198	123
From unroasted kernels	12171	124
From roasted and toasted kernels	12166	125
Sesame flour:		
High-fat	12170	126
Partially defatted	12032	127
Lowfat	12033	128
Sesame meal, partially defatted	12034	129
Sim-Sim. [See Sesame seeds (NDB Nos. 12023, 12024, 12029, 12032-12034, 12166, 12169-12171, 12198, 12201).]		
Sisymbrium sp. seeds, whole, dried	12193	130
Squash seeds. [See Pumpkin and Squash seeds (NDB Nos. 12014, 12016, 12163).]		
Sunflower seed kernels:		
Dried	2236	131
Dry roasted	12036	132
Oil roasted	12037	132
Toasted	12038	133
Sunflower seed butter	12039	134
Sunflower seed flour, partially defatted	12040	135
Watermelon seed kernels, dried	2237	136
	12041	136
	12174	137

TABLE OF NUTRIENT DATA

(Blank spaces indicate a lack of data.)

Acorns, raw
Quercus spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 38%
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g	F	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	27.90		7.92		78.45
Food energy	{ kcal	369		105		1,037
	kJ	1,543		438		4,340
Protein (N X 5.30)	g	6.15		1.75		17.29
Total lipid (fat)	g	23.86		6.78		67.08
Carbohydrate, total	g	40.75		11.57		114.58
Fiber	g	2.57		0.73		7.23
Ash	g	1.35		0.38		3.79
MINERALS:						
Calcium	mg	41		12		114
Iron	mg	0.79		0.22		2.23
Magnesium	mg	62		18		175
Phosphorus	mg	79		22		221
Potassium	mg	539		153		1,515
Sodium	mg	0		0		0
Zinc	mg	0.51		0.14		1.43
Copper	mg	0.621		0.176		1.746
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	0.0		0.0		0.0
Thiamin	mg	0.112		0.032		0.315
Riboflavin	mg	0.118		0.034		0.332
Niacin	mg	1.827		0.519		5.138
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	3.102		0.881		8.723
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	2.850	2	0.809		8.014
18:0	g	0.252	2	0.072		0.709
Monounsaturated, total	g	15.109		4.291		42.487
16:1	g					
18:1	g	15.109	2	4.291		42.487
20:1	g					
22:1	g					
Polyunsaturated, total	g	4.596	2	1.305		12.924
18:2	g	4.596	2	1.305		12.924
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.074	1	0.021		0.208
Threonine	g	0.236	1	0.067		0.664
Isoleucine	g	0.285	1	0.081		0.801
Leucine	g	0.489	1	0.139		1.375
Lysine	g	0.384	1	0.109		1.080
Methionine	g	0.103	1	0.029		0.290
Cystine	g	0.109	1	0.031		0.307
Phenylalanine	g	0.269	1	0.076		0.756
Tyrosine	g	0.187	1	0.053		0.526
Valine	g	0.345	1	0.098		0.970
Arginine	g	0.473	1	0.134		1.330
Histidine	g	0.170	1	0.048		0.478
Alanine	g	0.350	1	0.099		0.984
Aspartic acid	g	0.635	1	0.180		1.786
Glutamic acid	g	0.986	1	0.280		2.773
Glycine	g	0.285	1	0.081		0.801
Proline	g	0.246	1	0.070		0.692
Serine	g	0.261	1	0.074		0.734

NUTS

Acorns, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 38%
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	5.06	0.940	2	1.44	14.23
Food energy	{ kcal	509		145		1,432
	kJ	2,131		605		5,993
Protein (N X 5.30)	g	8.10	0.766	2	2.30	22.77
Total lipid (fat)	g	31.41	1.616	2	8.92	88.34
Carbohydrate, total	g	53.66			15.24	150.88
Fiber	g	3.38		1	0.96	9.52
Ash	g	1.78	1.305	2	0.50	4.99
MINERALS:						
Calcium	mg	54		1	15	151
Iron	mg	1.04		1	0.30	2.93
Magnesium	mg	82		1	23	230
Phosphorus	mg	103			29	291
Potassium	mg	709		1	201	1,995
Sodium	mg	0		1	0	0
Zinc	mg	0.67		1	0.19	1.88
Copper	mg	0.818		1	0.232	2.300
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	0.0			0.0	0.0
Thiamin	mg	0.149			0.042	0.419
Riboflavin	mg	0.154			0.044	0.433
Niacin	mg	2.406			0.683	6.766
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	4.084			1.160	11.484
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	3.753			1.066	10.553
18:0	g	0.332			0.094	0.934
Monounsaturated, total	g	19.896			5.650	55.948
16:1	g					
18:1	g	19.896			5.650	55.948
20:1	g					
22:1	g					
Polyunsaturated, total	g	6.052			1.719	17.018
18:2	g	6.052			1.719	17.018
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.098			0.028	0.276
Threonine	g	0.312			0.089	0.877
Isoleucine	g	0.376			0.107	1.057
Leucine	g	0.644			0.183	1.811
Lysine	g	0.505			0.143	1.420
Methionine	g	0.136			0.039	0.382
Cystine	g	0.144			0.041	0.405
Phenylalanine	g	0.354			0.101	0.995
Tyrosine	g	0.246			0.070	0.692
Valine	g	0.455			0.129	1.279
Arginine	g	0.623			0.177	1.752
Histidine	g	0.224			0.064	0.630
Alanine	g	0.461			0.131	1.296
Aspartic acid	g	0.837			0.238	2.354
Glutamic acid	g	1.299			0.369	3.653
Glycine	g	0.376			0.107	1.057
Proline	g	0.324			0.092	0.911
Serine	g	0.344			0.098	0.967

Acorn Flour, full-fat

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	6.00	1	1.70		27.22
Food energy	{ kcal	501		142		2,272
	{ kJ	2,096		595		9,507
Protein (N X 5.30)	g	7.49	1	2.13		33.97
Total lipid (fat)	g	30.17	1	8.57		136.87
Carbohydrate, total	g	54.65		15.52		247.87
Fiber	g	2.82	1	0.80		12.79
Ash	g	1.69	1	0.48		7.67
MINERALS:						
Calcium	mg	43	1	12		197
Iron	mg	1.21	1	0.34		5.50
Magnesium	mg	110	1	31		499
Phosphorus	mg	103	1	29		469
Potassium	mg	712	1	202		3,231
Sodium	mg					
Zinc	mg	0.64	1	0.18		2.90
Copper	mg	0.611	1	0.174		2.771
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	3.923		1.114		17.795
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g					
18:0	g	3.605		1.024		16.352
Monounsaturated, total	g	0.319		0.091		1.447
16:1	g	19.110		5.427		86.683
18:1	g					
20:1	g	19.110		5.427		86.683
22:1	g					
Polysaturated, total	g	5.813		1.651		26.368
18:2	g	5.813		1.651		26.368
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.090		0.026		0.408
Threonine	g	0.288		0.082		1.306
Isoleucine	g	0.348		0.099		1.579
Leucine	g	0.596		0.169		2.123
Lysine	g	0.468		0.133		2.123
Methionine	g	0.126		0.036		0.572
Cystine	g	0.133		0.038		0.603
Phenylalanine	g	0.328		0.093		1.488
Tyrosine	g	0.227		0.064		1.030
Valine	g	0.421		0.120		1.910
Arginine	g	0.577		0.164		2.617
Histidine	g	0.208		0.059		0.943
Alanine	g	0.427		0.121		1.937
Aspartic acid	g	0.774		0.220		3.511
Glutamic acid	g	1.202		0.341		5.452
Glycine	g	0.348		0.099		1.579
Proline	g	0.300		0.085		1.361
Serine	g	0.318		0.090		1.442

NUTS

Almonds, dried, unblanched

Prunus dulcis

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 60%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c whole kernels = 142 g ²		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	4.42	0.204	27	1.25 167 700	6.27 837 3,501	
Food energy	{ kcal kJ	589 2,466				8.01 1,069 4,472	
Protein (N X 5.18)	g	19.95	0.944	22	5.66 14.83	28.32 74.14	
Total lipid (fat)	g	52.21	1.016	19	5.79 0.77	94.71 37.00 3.85	
Carbohydrate, total	g	20.40				4.92	
Fiber ³	g	2.71	0.265	12	0.86	5.49	
Ash	g	3.03	0.127	21			
MINERALS:							
Calcium	mg	266	5.543	21	75	377	
Iron	mg	3.66	0.111	52	1.04	5.19	
Magnesium	mg	296	2.807	19	84	421	
Phosphorus	mg	520	9.752	21	148	738	
Potassium	mg	732	26.890	7	208	1,039	
Sodium	mg	11	2.906	3	3	15	
Zinc	mg	2.92	0.298	15	0.83	4.14	
Copper	mg	0.942	0.077	14	0.268	1.338	
Manganese ⁴	mg	2.273	0.212	6	0.646	3.228	
VITAMINS:							
Ascorbic acid	mg	0.6	0.600	2	0.2	0.9	
Thiamin	mg	0.211	0.012	15	0.060	0.300	
Riboflavin	mg	0.779	0.046	15	0.221	1.106	
Niacin	mg	3.361	0.115	15	0.955	4.773	
Pantothenic acid	mg	0.471			0.134	0.669	
Vitamin B ₆	mg	0.113	0.007	16	0.032	0.160	
Folacin	mcg	58.7	6.437	17	16.7	83.3	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	0			0	0	
	{ IU	0			0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.949			1.406	7.028	
4:0	g					8.977	
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005		1	0.001	0.007	
14:0	g	0.298		2	0.085	0.423	
16:0	g	3.455		44	0.981	4.906	
18:0	g	1.021		42	0.290	1.450	
Monounsaturated, total	g	33.902			9.628	48.141	
16:1	g	0.304		33	0.086	0.432	
18:1	g	33.276		43	9.450	47.252	
20:1	g	0.050		1	0.014	0.071	
22:1	g						
Polysaturated, total	g	10.957			3.112	15.559	
18:2	g	10.495		44	2.981	14.903	
18:3	g	0.374		3	0.106	0.531	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg	143			41	203	
AMINO ACIDS:							
Tryptophan	g	0.358		8	0.102	0.508	
Threonine	g	0.739		11	0.210	1.049	
Isoleucine	g	0.866		11	0.246	1.230	
Leucine	g	1.552		11	0.441	2.204	
Lysine	g	0.666		11	0.189	0.946	
Methionine	g	0.227		10	0.064	0.322	
Cystine	g	0.358		9	0.102	0.508	
Phenylalanine	g	1.113		11	0.316	1.580	
Tyrosine	g	0.705		11	0.200	1.001	
Valine	g	1.028		11	0.292	1.460	
Arginine	g	2.495		11	0.709	3.543	
Histidine	g	0.558		11	0.158	0.792	
Alanine	g	0.943		11	0.268	1.339	
Aspartic acid	g	2.349		11	0.667	3.336	
Glutamic acid	g	5.934		11	1.685	8.426	
Glycine	g	1.236		11	0.351	1.755	
Proline	g	1.255		11	0.356	1.782	
Serine	g	0.901		11	0.256	1.279	

¹ 1 oz = approx. 24 whole kernels.² 1 cup chopped = 130 g; 1 cup sliced or diced = 94 g; 1 cup slivered (packed) = 135 g.³ Insoluble dietary fiber as determined by the neutral detergent fiber method = 4.72 g per 100 g.⁴ Pectin = 1.34 g per 100 g.⁵ Alpha-tocopherol = 24.01 mg per 100 g.

Almonds, dried, blanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	G
				1 oz = 28.4 g	1 c whole kernels = 145 g ¹		
A	B	C	D	E	F		G
PROXIMATE:							
Water	g	5.42	0.161	20	1.54	7.86	24.60
Food energy	{ kcal	586		166	850	2,658	
	{ kJ	2,451		696	3,555	11,120	
Protein (N X 5.18)	g	20.42	0.503	24	5.80	29.60	92.60
Total lipid (fat)	g	52.53	0.576	18	14.92	76.16	238.26
Carbohydrate, total	g	18.53			5.26	28.87	84.06
Fiber	g	2.29	0.256	10	0.65	3.32	10.38
Ash	g	3.11	0.065	17	0.88	4.50	14.08
MINERALS:							
Calcium	mg	247	5.372	23	70	358	1,121
Iron	mg	3.63	0.092	23	1.03	5.26	16.46
Magnesium	mg	286	5.061	23	81	415	1,299
Phosphorus	mg	532	12.312	23	151	771	2,412
Potassium	mg	750	24.832	11	213	1,088	3,403
Sodium	mg	10	0.854	14	3	15	47
Zinc	mg	3.16	0.276	17	0.90	4.58	14.34
Copper	mg	1.071	0.042	17	0.304	1.553	4.858
Manganese ²	mg	1.452	0.054	10	0.412	2.105	6.586
VITAMINS:							
Ascorbic acid	mg	0.6	0.600	2	0.2	0.9	2.7
Thiamin	mg	0.161	0.007	14	0.046	0.233	0.730
Riboflavin	mg	0.677	0.040	13	0.192	0.982	3.071
Niacin	mg	3.166	0.085	13	0.899	4.591	14.361
Pantothenic acid.	mg	0.467			0.133	0.677	2.118
Vitamin B ₆	mg	0.101	0.008	16	0.029	0.146	0.458
Folacin	mcg	38.4	2.673	12	10.9	55.7	174.2
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	0		1	0	0	0
	{ IU	0		1	0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.979			1.414	7.220	22.585
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005			0.001	0.007	0.023
14:0	g	0.299			0.085	0.434	1.356
16:0	g	3.476			0.987	5.040	15.767
18:0	g	1.027			0.292	1.489	4.658
Monounsaturated, total	g	34.106			9.686	49.454	154.705
16:1	g	0.306			0.087	0.444	1.388
18:1	g	33.475			9.507	48.539	151.843
20:1	g	0.050			0.014	0.073	0.227
22:1	g						
Polyunsaturated, total	g	11.023			3.131	15.983	50.000
18:2	g	10.558			2.998	15.309	47.891
18:3	g	0.376			0.107	0.545	1.706
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.367			0.104	0.532	1.665
Threonine	g	0.757			0.215	1.098	3.434
Isoleucine	g	0.887			0.252	1.286	4.023
Leucine	g	1.588			0.451	2.303	7.203
Lysine	g	0.682			0.194	0.989	3.094
Methionine	g	0.233			0.066	0.338	1.057
Cystine	g	0.367			0.104	0.532	1.665
Phenylalanine	g	1.139			0.323	1.652	5.167
Tyrosine	g	0.721			0.205	1.045	3.270
Valine	g	1.052			0.299	1.525	4.772
Arginine	g	2.554			0.725	3.703	11.585
Histidine	g	0.571			0.162	0.828	2.590
Alanine	g	0.966			0.274	1.401	4.382
Aspartic acid	g	2.404			0.683	3.486	10.905
Glutamic acid	g	6.073			1.725	8.806	27.547
Glycine	g	1.265			0.359	1.834	5.738
Proline	g	1.285			0.365	1.863	5.829
Serine	g	0.922			0.262	1.337	4.182

¹ 1 cup sliced = 105 g.² Alpha-tocopherol = 20.26 mg per 100 g.

NUTS

Almonds, dry roasted, unblanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	1 oz = 28.4 g	1 c whole kernels = 138 g	Refuse: 0
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	3.00	1	0.85	4.14	13.61
Food energy	{ kcal	587		167	810	2,662
Food energy	{ kJ	2,456		697	3,389	11,139
Protein (N X 5.18)	g	16.33	1	4.64	22.53	74.06
Total lipid (fat)	g	51.60	1	14.65	71.21	234.06
Carbohydrate, total	g	24.17		6.87	33.36	109.65
Fiber	g	4.94		1.40	6.81	22.40
Ash	g	4.90	1	1.39	6.76	22.23
MINERALS:						
Calcium	mg	282		80	389	1,279
Iron	mg	3.80		1.08	5.25	17.25
Magnesium	mg	304		86	419	1,379
Phosphorus	mg	548		156	756	2,485
Potassium	mg	770	1	219	1,063	3,493
Sodium ¹	mg	11		3	15	49
Zinc	mg	4.90		1.39	6.76	22.23
Copper	mg	1.225		0.348	1.691	5.557
Manganese	mg	1.977		0.561	2.728	8.968
VITAMINS:						
Ascorbic acid	mg	0.7		0.2	1.0	3.2
Thiamin	mg	0.130		0.037	0.179	0.590
Riboflavin	mg	0.599		0.170	0.827	2.717
Niacin	mg	2.817		0.800	3.887	12.778
Pantothenic acid	mg	0.254		0.072	0.351	1.152
Vitamin B ₆	mg	0.074		0.021	0.102	0.336
Folacin	mcg	63.8		18.1	88.1	289.6
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE	0		0	0	0
	{ IU	0		0	0	0
LIPIDS:						
Fatty acids:						
Saturated, total	g	4.891		1.389	6.750	22.186
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.005		0.001	0.007	0.023
14:0	g	0.294		0.083	0.406	1.334
16:0	g	3.414		0.970	4.711	15.486
18:0	g	1.009		0.287	1.392	4.577
Monounsaturated, total	g	33.504		9.515	46.236	151.974
16:1	g	0.300		0.085	0.414	1.361
18:1	g	32.885		9.339	45.381	149.166
20:1	g	0.049		0.014	0.068	0.222
22:1	g					
Polyunsaturated, total	g	10.828		3.075	14.943	49.116
18:2	g	10.372		2.946	14.313	47.047
18:3	g	0.369		0.105	0.509	1.674
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.293		0.083	0.404	1.329
Threonine	g	0.605		0.172	0.835	2.744
Isoleucine	g	0.709		0.201	0.978	3.216
Leucine	g	1.270		0.361	1.753	5.761
Lysine	g	0.545		0.155	0.752	2.472
Methionine	g	0.186		0.053	0.257	0.844
Cystine	g	0.293		0.083	0.404	1.329
Phenylalanine	g	0.911		0.259	1.257	4.132
Tyrosine	g	0.577		0.164	0.796	2.617
Valine	g	0.842		0.239	1.162	3.819
Arginine	g	2.042		0.580	2.818	9.263
Histidine	g	0.457		0.130	0.631	2.073
Alanine	g	0.772		0.219	1.065	3.502
Aspartic acid	g	1.923		0.546	2.654	8.723
Glutamic acid	g	4.857		1.379	6.703	22.031
Glycine	g	1.012		0.287	1.397	4.590
Proline	g	1.028		0.292	1.419	4.663
Serine	g	0.738		0.210	1.018	3.348

¹ Value based on data for product without added salt. Product with added salt contains 780 mg sodium per 100 g.

Almonds, oil roasted, unblanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				1 oz = 28.4 g ¹	1 c whole kernels = 157 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	3.08	0.503	7	0.88	4.84
Food energy	{ kcal	618		176	970	13.99
	kJ	2,586		734	4,060	2,803
Protein (N X 5.18)	g	20.39	0.913	3	5.79	11,730
Total lipid (fat)	g	57.67	1.753	3	16.38	92.48
Carbohydrate, total	g	15.88			4.51	261.58
Fiber	g	4.93	1.434	3	1.40	72.02
Ash	g	2.98	0.017	3	0.85	22.38
					4.68	13.53
MINERALS:						
Calcium	mg	234	28.844	3	66	367
Iron	mg	3.83	0.491	3	1.09	6.02
Magnesium	mg	304	16.446	5	86	1,377
Phosphorus	mg	547	48.721	3	155	859
Potassium	mg	683	13.371	3	194	2,483
Sodium ²	mg	10	2.082	3	3	3,100
Zinc	mg	4.90	2.097	6	1.39	45
Copper	mg	1.224	0.230	5	0.348	22.20
Manganese	mg	1.975	0.326	4	0.561	5.552
					3.101	8.959
VITAMINS:						
Ascorbic acid	mg	0.7	0.700	2	0.2	1.1
Thiamin	mg	0.130	0.000	2	0.037	0.204
Riboflavin	mg	0.990		1	0.281	0.590
Niacin	mg	3.500		1	0.994	4.491
Pantothenic acid	mg	0.254			0.072	15.876
Vitamin B ₆	mg	0.084	0.014	4	0.024	0.399
Folacin	mcg	63.8			18.1	0.132
Vitamin B ₁₂	mcg	0			100.1	0.381
Vitamin A	{ RE	0		1	0	289.3
	IU	0		1	0	0
					0	0
LIPIDS:						
Fatty acids:						
Saturated, total	g	5.466			1.552	24.794
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g					
18:0	g					
Monounsaturated, total	g	37.444			10.634	58.787
16:1	g					
18:1	g					
20:1	g					
22:1	g					
Polyunsaturated, total	g	12.101			3.437	18.999
18:2	g					
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg				0	0
AMINO ACIDS:						
Tryptophan	g	0.366			0.104	0.575
Threonine	g	0.756			0.215	1.187
Isoleucine	g	0.886			0.252	3.429
Leucine	g	1.586			0.450	4.019
Lysine	g	0.681			0.193	7.194
Methionine	g	0.232			0.066	3.089
Cystine	g	0.366			0.104	1.052
Phenylalanine	g	1.138			0.323	1.517
Tyrosine	g	0.720			0.204	5.660
Valine	g	1.051			0.298	1.787
Arginine	g	2.551			0.724	1.130
Histidine	g	0.571			0.162	4.767
Alanine	g	0.964			0.274	1.513
Aspartic acid	g	2.401			0.682	4.373
Glutamic acid	g	6.065			1.722	10.891
Glycine	g	1.263			0.359	27.511
Proline	g	1.283			0.364	5.729
Serine	g	0.921			0.262	5.820
						4.178

¹ 1 oz = approx. 22 whole kernels.² Value based on data for product without added salt. Product with added salt contains 779 mg sodium per 100 g.

Almonds, oil roasted, blanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g ¹	1 c whole kernels = 142 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.51	0.112	5	1.00	4.99	15.93
Food energy	{ kcal	613		174	870		2,779
Food energy	{ kJ	2,563		728	3,640		11,626
Protein (N X 5.18)	g	19.04	0.561	3	5.41	27.03	86.34
Total lipid (fat)	g	56.53	0.982	3	16.06	80.28	256.43
Carbohydrate, total	g	18.02			5.12	25.59	81.75
Fiber	g	3.12	0.471	3	0.89	4.43	14.17
Ash	g	2.90	0.058	3	0.82	4.11	13.14
MINERALS:							
Calcium	mg	194	10.333	3	55	276	881
Iron	mg	5.30	1.701	3	1.51	7.53	24.04
Magnesium	mg	290	5.207	3	82	412	1,317
Phosphorus	mg	577	61.260	3	164	819	2,616
Potassium	mg	693	16.502	3	197	984	3,143
Sodium ²	mg	12	1.000	3	3	17	54
Zinc	mg	1.42	1.191	3	0.40	2.01	6.43
Copper	mg	0.930	0.186	3	0.264	1.321	4.218
Manganese	mg	1.475	0.055	2	0.419	2.095	6.691
VITAMINS:³							
Ascorbic acid	mg	1.0		1	0.3	1.4	4.5
Thiamin	mg	0.078		1	0.022	0.111	0.354
Riboflavin	mg	0.280		1	0.080	0.398	1.270
Niacin	mg	3.900		1	1.108	5.538	17.690
Pantothenic acid	mg	0.253			0.072	0.359	1.148
Vitamin B ₆	mg	0.092	0.030	2	0.026	0.131	0.417
Folacin	mcg	63.5			18.0	90.2	288.1
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	0			0	0	0
	{ IU	0			0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.359			1.522	7.610	24.308
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005			0.001	0.007	0.023
14:0	g	0.322			0.091	0.457	1.461
16:0	g	3.741			1.062	5.312	16.969
18:0	g	1.106			0.314	1.571	5.017
Monounsaturated, total	g	36.707			10.425	52.124	166.503
16:1	g	0.329			0.093	0.467	1.492
18:1	g	36.029			10.232	51.161	163.428
20:1	g	0.054			0.015	0.077	0.245
22:1	g						
Polyunsaturated, total	g	11.863			3.369	16.845	53.811
18:2	g	11.363			3.227	16.135	51.543
18:3	g	0.405			0.115	0.575	1.837
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.342			0.097	0.486	1.551
Threonine	g	0.706			0.201	1.003	3.202
Isoleucine	g	0.827			0.235	1.174	3.751
Leucine	g	1.481			0.421	2.103	6.718
Lysine	g	0.636			0.181	0.903	2.885
Methionine	g	0.217			0.062	0.308	0.984
Cystine	g	0.342			0.097	0.486	1.551
Phenylalanine	g	1.062			0.302	1.508	4.817
Tyrosine	g	0.673			0.191	0.956	3.053
Valine	g	0.981			0.279	1.393	4.450
Arginine	g	2.381			0.676	3.381	10.800
Histidine	g	0.533			0.151	0.757	2.418
Alanine	g	0.900			0.256	1.278	4.082
Aspartic acid	g	2.242			0.637	3.184	10.170
Glutamic acid	g	5.663			1.608	8.041	25.687
Glycine	g	1.180			0.335	1.676	5.352
Proline	g	1.198			0.340	1.701	5.434
Serine	g	0.860			0.244	1.221	3.901

¹ 1 oz = approx. 24 whole kernels.² Value based on data for product without added salt. Product with added salt contains 776 mg sodium per 100 g.³ Alpha-tocopherol = 5.55 mg per 100 g.

Almonds, toasted, unblanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
	A	B	C	D	E	F	G
1 oz = 28.4 g						
PROXIMATE:						
Water	g	2.60		0.74		11.79
Food energy	{ kcal	589		167		2,671
	kJ	2,464		700		11,177
Protein (N X 5.18)	g	20.38	1	5.79		92.46
Total lipid (fat)	g	50.77		14.42		230.29
Carbohydrate, total	g	22.91		6.51		103.91
Fiber	g	4.96		1.41		22.49
Ash	g	3.34		0.95		15.15
MINERALS:						
Calcium	mg	283		80		1,284
Iron	mg	4.92		1.40		22.32
Magnesium	mg	305		87		1,385
Phosphorus	mg	550		156		2,496
Potassium	mg	773		220		3,507
Sodium	mg	11		3		49
Zinc	mg	4.92		1.40		22.32
Copper	mg	1.230		0.349		5.579
Manganese. ¹	mg	2.005		0.569		9.095
VITAMINS:						
Ascorbic acid	mg	0.7		0.2		3.2
Thiamin	mg	0.131		0.037		0.594
Riboflavin	mg	0.601		0.171		2.726
Niacin	mg	2.829		0.803		12.832
Pantothenic acid.	mg	0.256		0.073		1.161
Vitamin B ₆	mg	0.074		0.021		0.336
Folacin	mcg	64.1		18.2		290.8
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE	0		0		0
	{ IU	0		0		0
LIPIDS:						
Fatty acids:						
Saturated, total	g	4.812		1.367		21.827
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.005		0.001		0.023
14:0	g	0.289		0.082		1.311
16:0	g	3.359		0.954		15.236
18:0	g	0.993		0.282		4.504
Monounsaturated, total	g	32.965		9.362		149.529
16:1	g	0.295		0.084		1.338
18:1	g	32.356		9.189		146.767
20:1	g	0.048		0.014		0.218
22:1	g					
Polyunsaturated, total	g	10.654		3.026		48.327
18:2	g	10.205		2.898		46.290
18:3	g	0.364		0.103		1.651
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.366		0.104		1.660
Threonine	g	0.756		0.215		3.429
Isoleucine	g	0.885		0.251		4.014
Leucine	g	1.586		0.450		7.194
Lysine	g	0.681		0.193		3.089
Methionine	g	0.232		0.066		1.052
Cystine	g	0.366		0.104		1.660
Phenylalanine	g	1.137		0.323		5.157
Tyrosine	g	0.720		0.204		3.266
Valine	g	1.051		0.298		4.767
Arginine	g	2.550		0.724		11.567
Histidine	g	0.571		0.162		2.590
Alanine	g	0.964		0.274		4.373
Aspartic acid	g	2.400		0.682		10.886
Glutamic acid	g	6.064		1.722		27.506
Glycine	g	1.263		0.359		5.729
Proline	g	1.283		0.364		5.820
Serine	g	0.921		0.262		4.178

¹ Alpha-tocopherol = 50.27 mg per 100 g.

Almond Butter, plain

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 tbsp = 16 g	1 c = 250 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.00		0.16	2.50	4.54	
Food energy	{ kcal	633	1	101	1,583	2,873	
	kJ	2,650		424	6,625	12,020	
Protein (Nx 5.18)	g	15.08	1	2.41	37.71	68.42	
Total lipid (fat)	g	59.10	1	9.46	147.75	268.08	
Carbohydrate, total	g	21.22		3.39	53.04	96.24	
Fiber	g	1.50	1	0.24	3.75	6.80	
Ash	g	3.60	1	0.58	9.00	16.33	
MINERALS:							
Calcium	mg	270		43	674	1,224	
Iron	mg	3.70		0.59	9.24	16.77	
Magnesium	mg	303		48	758	1,375	
Phosphorus	mg	523		84	1,307	2,372	
Potassium	mg	758		121	1,894	3,436	
Sodium ¹	mg	11		2	28	50	
Zinc	mg	3.05	1	0.49	7.63	13.83	
Copper	mg	0.900	1	0.144	2.250	4.082	
Manganese	mg	2.354		0.377	5.885	10.678	
VITAMINS:							
Ascorbic acid	mg	0.7		0.1	1.8	3.2	
Thiamin	mg	0.133		0.021	0.333	0.603	
Riboflavin	mg	0.611		0.098	1.528	2.771	
Niacin	mg	2.875		0.460	7.188	13.041	
Pantothenic acid	mg	0.259		0.041	0.648	1.175	
Vitamin B ₆	mg	0.076		0.012	0.190	0.345	
Folacin	mcg	65.2		10.4	162.9	295.6	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	0		0	0	0	
	{ IU	0		0	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.602		0.896	14.005	25.411	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005		0.001	0.013	0.023	
14:0	g	0.337		0.054	0.843	1.529	
16:0	g	3.911		0.626	9.778	17.740	
18:0	g	1.156		0.185	2.890	5.244	
Monounsaturated, total	g	38.374		6.140	95.935	174.064	
16:1	g	0.344		0.055	0.860	1.560	
18:1	g	37.665		6.026	94.163	170.848	
20:1	g	0.056		0.009	0.140	0.254	
22:1	g						
Polyunsaturated, total	g	12.402		1.984	31.005	56.255	
18:2	g	11.879		1.901	29.698	53.883	
18:3	g	0.423		0.068	1.058	1.919	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.271		0.043	0.678	1.229	
Threonine	g	0.559		0.089	1.398	2.536	
Isoleucine	g	0.655		0.105	1.638	2.971	
Leucine	g	1.174		0.188	2.935	5.325	
Lysine	g	0.504		0.081	1.260	2.286	
Methionine	g	0.172		0.028	0.430	0.780	
Cystine	g	0.271		0.043	0.678	1.229	
Phenylalanine	g	0.842		0.135	2.105	3.819	
Tyrosine	g	0.533		0.085	1.333	2.418	
Valine	g	0.778		0.124	1.945	3.529	
Arginine	g	1.887		0.302	4.718	8.559	
Histidine	g	0.422		0.068	1.055	1.914	
Alanine	g	0.713		0.114	1.783	3.234	
Aspartic acid	g	1.776		0.284	4.440	8.056	
Glutamic acid	g	4.487		0.718	11.218	20.353	
Glycine	g	0.935		0.150	2.338	4.241	
Proline	g	0.949		0.152	2.373	4.305	
Serine	g	0.681		0.109	1.703	3.089	

¹ Value based on data for product without added salt. Product with added salt contains 450 mg sodium per 100 g.

Almond Butter, honey and cinnamon

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 tbsp = 16 g	1 c = 250 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	2.00	1	0.32	5.00	9.07	
Food energy	{ kcal	602	96	1,504	2,729		
	kJ	2,517	403	6,293	11,418		
Protein (Nx 5.18)	g	15.83	1	2.53	39.58	71.80	
Total lipid (fat)	g	52.20	1	8.35	130.50	236.78	
Carbohydrate, total	g	26.97		4.32	67.43	122.34	
Fiber	g	1.50	1	0.24	3.75	6.80	
Ash	g	3.00	1	0.48	7.50	13.61	
MINERALS:							
Calcium	mg	267		43	668	1,211	
Iron	mg	3.66		0.59	9.15	16.60	
Magnesium	mg	300		48	750	1,361	
Phosphorus	mg	518		83	1,294	2,348	
Potassium	mg	750		120	1,875	3,402	
Sodium ¹	mg	11		2	27	50	
Zinc	mg	2.99		0.48	7.47	13.56	
Copper	mg	0.966		0.155	2.415	4.382	
Manganese	mg	2.330		0.373	5.825	10.569	
VITAMINS:							
Ascorbic acid	mg	0.7		0.1	1.8	3.2	
Thiamin	mg	0.131		0.021	0.328	0.594	
Riboflavin	mg	0.605		0.097	1.513	2.744	
Niacin	mg	2.846		0.455	7.115	12.909	
Pantothenic acid	mg	0.257		0.041	0.643	1.166	
Vitamin B ₆	mg	0.075		0.012	0.188	0.340	
Folacin	mcg	64.5		10.3	161.3	292.6	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	0		0	0	0	
	IU	0		0	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.948		0.792	12.370	22.444	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005		0.001	0.013	0.023	
14:0	g	0.298		0.048	0.745	1.352	
16:0	g	3.454		0.553	8.635	15.667	
18:0	g	1.021		0.163	2.553	4.631	
Monounsaturated, total	g	33.894		5.423	84.735	153.743	
16:1	g	0.304		0.049	0.760	1.379	
18:1	g	33.268		5.323	83.170	150.904	
20:1	g	0.050		0.008	0.125	0.227	
22:1	g						
Polyunsaturated, total	g	10.954		1.753	27.385	49.687	
18:2	g	10.492		1.679	26.230	47.592	
18:3	g	0.374		0.060	0.935	1.696	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.284		0.045	0.710	1.288	
Threonine	g	0.587		0.094	1.468	2.663	
Isoleucine	g	0.688		0.110	1.720	3.121	
Leucine	g	1.232		0.197	3.080	5.588	
Lysine	g	0.529		0.085	1.323	2.400	
Methionine	g	0.180		0.029	0.450	0.816	
Cystine	g	0.284		0.045	0.710	1.288	
Phenylalanine	g	0.883		0.141	2.208	4.005	
Tyrosine	g	0.559		0.089	1.398	2.536	
Valine	g	0.816		0.131	2.040	3.701	
Arginine	g	1.980		0.317	4.950	8.981	
Histidine	g	0.443		0.071	1.108	2.009	
Alanine	g	0.749		0.120	1.873	3.397	
Aspartic acid	g	1.864		0.298	4.660	8.455	
Glutamic acid	g	4.709		0.753	11.773	21.360	
Glycine	g	0.981		0.157	2.453	4.450	
Proline	g	0.996		0.159	2.490	4.518	
Serine	g	0.715		0.114	1.788	3.243	

¹ Value based on data for product without added salt. Product made with added salt contains 170 mg sodium per 100 g.

Almond Meal, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
A	B	C	D	E	F	G
PROXIMATE:				1 oz = 28.4 g		
Water	g	7.20		2.04		32.66
Food energy	{ kcal	408		116		1,851
	kJ	1,707		485		7,743
Protein (N X 5.18)	g	39.50		11.22		179.17
Total lipid (fat)	g	18.30		5.20		83.01
Carbohydrate, total	g	28.90		8.21		131.09
Fiber	g	2.30		0.65		10.43
Ash	g	6.10		1.73		27.67
MINERALS:						
Calcium	mg	424		120		1,923
Iron	mg	8.50		2.41		38.56
Magnesium	mg					
Phosphorus	mg	914		260		4,146
Potassium	mg	1,400		398		6,350
Sodium ²	mg	7		2		32
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.320		0.091		1.452
Riboflavin	mg	1.680		0.477		7.620
Niacin	mg	6.300		1.789		28.577
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE	0		0		0
	IU	0		0		
LIPIDS:						
Fatty acids:						
Saturated, total	g	1.735		0.493		7.870
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.002		0.001		0.009
14:0	g	0.104		0.030		0.472
16:0	g	1.211		0.344		5.493
18:0	g	0.358		0.102		1.624
Monounsaturated, total	g	11.882		3.374		53.897
16:1	g	0.107		0.030		0.485
18:1	g	11.663		3.312		52.903
20:1	g	0.017		0.005		0.077
22:1	g					
Polyunsaturated, total	g	3.840		1.091		17.418
18:2	g	3.678		1.045		16.683
18:3	g	0.131		0.037		0.594
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.709		0.201		3.216
Threonine	g	1.464		0.416		6.641
Isoleucine	g	1.716		0.487		7.784
Leucine	g	3.073		0.873		13.939
Lysine	g	1.319		0.375		5.983
Methionine	g	0.450		0.128		2.041
Cystine	g	0.709		0.201		3.216
Phenylalanine	g	2.204		0.626		9.997
Tyrosine	g	1.395		0.396		6.328
Valine	g	2.036		0.578		9.235
Arginine	g	4.941		1.403		22.412
Histidine	g	1.106		0.314		5.017
Alanine	g	1.868		0.531		8.473
Aspartic acid	g	4.651		1.321		21.097
Glutamic acid	g	11.750		3.337		53.298
Glycine	g	2.448		0.695		11.104
Proline	g	2.486		0.706		11.276
Serine	g	1.784		0.507		8.092

¹ Proximate, mineral, and vitamin values from U.S. Dept. Agr., Agr. Handb. 8 (rev. 1963).² Value based on data for product without added salt. Product with added salt contains 746 mg sodium per 100 g.

Almond Paste

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g	1 c firmly packed = 227 g	
	A	B	C	D	E	G
PROXIMATE:						
Water	g	15.50	1	4.40	35.19	70.31
Food energy	{ kcal	446	127	1,012	2,022	
	kJ	1,866	530	4,235	8,462	
Protein (N X 5.18)	g	11.85	1	3.37	26.90	53.75
Total lipid (fat)	g	27.20	1	7.72	61.74	123.38
Carbohydrate, total	g	43.55		12.37	98.86	197.54
Fiber	g	6.00	1	1.70	13.62	27.22
Ash	g	1.90	1	0.54	4.31	8.62
MINERALS:						
Calcium	mg	230	65	523	1,045	
Iron	mg	3.16	0.90	7.16	14.31	
Magnesium	mg	259	73	587	1,173	
Phosphorus	mg	446	127	1,013	2,024	
Potassium	mg	647	184	1,468	2,933	
Sodium	mg	9	3	21	43	
Zinc	mg	2.58	0.73	5.85	11.69	
Copper	mg	0.833	0.237	1.891	3.778	
Manganese	mg	2.009	0.571	4.560	9.113	
VITAMINS:						
Ascorbic acid	mg	0.5	0.2	1.2	2.4	
Thiamin	mg	0.209	0.059	0.474	0.948	
Riboflavin	mg	0.735	0.209	1.668	3.334	
Niacin	mg	2.890	0.821	6.560	13.109	
Pantothenic acid	mg	0.416	0.118	0.944	1.887	
Vitamin B ₆	mg	0.098	0.028	0.222	0.445	
Folacin	mcg	55.6	15.8	126.3	252.3	
Vitamin B ₁₂	mcg	0	0	0	0	
Vitamin A	{ RE	0	0	0	0	
	IU	0	0	0	0	
LIPIDS:						
Fatty acids:						
Saturated, total	g	2.578	0.732	5.852	11.694	
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.002	0.001	0.005	0.009	
14:0	g	0.155	0.044	0.352	0.703	
16:0	g	1.800	0.511	4.086	8.165	
18:0	g	0.532	0.151	1.208	2.413	
Monounsaturated, total . . .	g	17.661	5.016	40.090	80.110	
16:1	g	0.158	0.045	0.359	0.717	
18:1	g	17.335	4.923	39.350	78.632	
20:1	g	0.026	0.007	0.059	0.118	
22:1	g					
Polysaturated, total	g	5.708	1.621	12.957	25.891	
18:2	g	5.467	1.553	12.410	24.798	
18:3	g	0.195	0.055	0.443	0.885	
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0	0	0	0	
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.213	0.060	0.484	0.966	
Threonine	g	0.439	0.125	0.997	1.991	
Isoleucine	g	0.515	0.146	1.169	2.336	
Leucine	g	0.922	0.262	2.093	4.182	
Lysine	g	0.396	0.112	0.899	1.796	
Methionine	g	0.135	0.038	0.306	0.612	
Cystine	g	0.213	0.060	0.484	0.966	
Phenylalanine	g	0.661	0.188	1.500	2.998	
Tyrosine	g	0.419	0.119	0.951	1.901	
Valine	g	0.611	0.174	1.387	2.771	
Arginine	g	1.483	0.421	3.366	6.727	
Histidine	g	0.332	0.094	0.754	1.506	
Alanine	g	0.561	0.159	1.273	2.545	
Aspartic acid	g	1.396	0.396	3.169	6.332	
Glutamic acid	g	3.526	1.001	8.004	15.994	
Glycine	g	0.734	0.208	1.666	3.329	
Proline	g	0.746	0.212	1.693	3.384	
Serine	g	0.535	0.152	1.214	2.427	

Almond Powder, full-fat

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g 1 c not packed = 65 g			
				B	C		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.33	0.592	3	0.95	2.16	
Food energy	{ kcal	592		168	385	15.10	
	{ kJ	2,477		703	1,610	2,685	
Protein (Nx 5.18)	g	19.81	0.083	3	5.63	11,236	
Total lipid (fat)	g	51.67	2.723	3	14.67	89.86	
Carbohydrate, total	g	22.36			6.35	234.38	
Fiber	g	1.90	0.100	3	0.54	101.42	
Ash	g	2.83	0.120	3	0.80	8.62	
MINERALS:							
Calcium	mg	218		1	62	1.82	
Iron	mg	2.80		1	0.80	989	
Magnesium	mg	308		1	87	12.70	
Phosphorus	mg	608		1	173	1,397	
Potassium	mg	709		1	201	2,758	
Sodium	mg	6		1	2	3,216	
Zinc	mg	0.22		1	0.06	27	
Copper	mg	0.690		1	0.196	1.00	
Manganese	mg	1.420		1	0.403	3.130	
VITAMINS:							
Ascorbic acid	mg	0.5		1	0.1	6.441	
Thiamin	mg	0.200		1	0.057	0.907	
Riboflavin	mg	1.180		1	0.335	5.352	
Niacin	mg	2.350		1	0.667	10.660	
Pantothenic acid	mg						
Vitamin B6	mg						
Folacin	mcg						
Vitamin B12	mcg	0			0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.898			1.391	3.184	
4:0	g					22.217	
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.005			0.001	0.023	
14:0	g	0.295			0.084	1.338	
16:0	g	3.419			0.971	15.509	
18:0	g	1.011			0.287	4.586	
Monounsaturated, total	g	33.548			9.528	21.806	
16:1	g	0.301			0.085	152.174	
18:1	g	32.928			9.352	1.365	
20:1	g	0.049			0.014	149.361	
22:1	g					0.222	
Polyunsaturated, total	g	10.842			3.079	7.047	
18:2	g	10.385			2.949	49.179	
18:3	g	0.370			0.105	47.106	
18:4	g					1.678	
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.356			0.101	0.231	
Threonine	g	0.734			0.208	1.615	
Isoleucine	g	0.860			0.244	3.329	
Leucine	g	1.541			0.438	3.901	
Lysine	g	0.662			0.188	6.990	
Methionine	g	0.226			0.064	3.003	
Cystine	g	0.356			0.101	1.025	
Phenylalanine	g	1.105			0.314	1.615	
Tyrosine	g	0.700			0.199	5.012	
Valine	g	1.021			0.290	3.175	
Arginine	g	2.478			0.704	4.631	
Histidine	g	0.554			0.157	11.240	
Alanine	g	0.937			0.266	2.513	
Aspartic acid	g	2.333			0.663	4.250	
Glutamic acid	g	5.893			1.674	10.582	
Glycine	g	1.228			0.349	26.731	
Proline	g	1.247			0.354	5.570	
Serine	g	0.895			0.254	5.656	
						4.060	

Almond Powder, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c not packed = 65 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	9.40	1	2.67	6.11	42.64	
Food energy	{ kcal	393		112	255	1,783	
	kJ	1,646		467	1,070	7,466	
Protein (Nx 5.18)	g	37.46	1	10.64	24.35	169.92	
Total lipid (fat)	g	16.00	1	4.54	10.40	72.58	
Carbohydrate, total	g	31.84		9.04	20.70	144.43	
Fiber	g	2.80	1	0.80	1.82	12.70	
Ash	g	5.30	1	1.51	3.45	24.04	
MINERALS:							
Calcium	mg	237		67	154	1,074	
Iron	mg	3.48		0.99	2.26	15.76	
Magnesium	mg	274		78	178	1,244	
Phosphorus	mg	509		145	331	2,310	
Potassium	mg	719		204	467	3,260	
Sodium	mg	10		3	6	45	
Zinc	mg	3.03		0.86	1.97	13.74	
Copper	mg	1.026		0.291	0.667	4.654	
Manganese	mg	1.391		0.395	0.904	6.310	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg						
Vitamin A	{ RE	0		0	0	0	
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	1.517		0.431	0.986	6.881	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.001		0.000	0.001	0.005	
14:0	g	0.091		0.026	0.059	0.413	
16:0	g	1.059		0.301	0.688	4.804	
18:0	g	0.313		0.089	0.203	1.420	
Monounsaturated, total	g	10.389		2.950	6.753	47.125	
16:1	g	0.093		0.026	0.060	0.422	
18:1	g	10.197		2.896	6.628	46.254	
20:1	g	0.015		0.004	0.010	0.068	
22:1	g						
Polyunsaturated, total	g	3.358		0.954	2.183	15.232	
18:2	g	3.216		0.913	2.090	14.588	
18:3	g	0.115		0.033	0.075	0.522	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.673		0.191	0.437	3.053	
Threonine	g	1.389		0.394	0.903	6.301	
Isoleucine	g	1.627		0.462	1.058	7.380	
Leucine	g	2.914		0.828	1.894	13.218	
Lysine	g	1.251		0.355	0.813	5.675	
Methionine	g	0.427		0.121	0.278	1.937	
Cystine	g	0.673		0.191	0.437	3.053	
Phenylalanine	g	2.090		0.594	1.359	9.480	
Tyrosine	g	1.323		0.376	0.860	6.001	
Valine	g	1.031		0.548	1.255	8.759	
Arginine	g	4.686		1.331	3.046	21.256	
Histidine	g	1.049		0.298	0.682	4.758	
Alanine	g	1.772		0.503	1.152	8.038	
Aspartic acid	g	4.412		1.253	2.868	20.013	
Glutamic acid	g	11.145		3.165	7.244	50.554	
Glycine	g	2.321		0.659	1.509	10.528	
Proline	g	2.358		0.670	1.533	10.696	
Serine	g	1.692		0.481	1.100	7.675	

¹ Product made from blanched almonds.

Beechnuts, dried
Fagus spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 39%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water ¹	g	6.60		1.87		18.26	
Food energy	{ kcal	576		164		1,595	
	{ kJ	2,411		685		6,673	
Protein (N X 5.30)	g	6.20	1	1.76		17.16	
Total lipid (fat) ¹	g	50.00		14.20		138.35	
Carbohydrate, total	g	33.50		9.51		92.69	
Fiber ¹	g	3.70		1.05		10.24	
Ash ¹	g	3.70		1.05		10.24	
MINERALS:							
Calcium	mg	1	1	0		3	
Iron	mg					0	
Magnesium	mg	0	1	0		1	
Phosphorus	mg	0	1	0			
Potassium	mg						
Sodium	mg						
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.719		1.624		15.824	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.063	2	0.018		0.174	
16:0	g	3.569	4	1.014		9.875	
18:0	g	1.183	4	0.336		3.273	
Monounsaturated, total	g	21.892		6.217		60.575	
16:1	g	0.287	3	0.082		0.794	
18:1	g	18.849	4	5.353		52.155	
20:1	g	2.757	3	0.783		7.629	
Polyunsaturated, total	g	20.089		5.705		55.586	
18:2	g	18.390	4	5.223		50.885	
18:3	g	1.700	3	0.483		4.704	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g						
Threonine	g						
Isoleucine	g						
Leucine	g						
Lysine	g						
Methionine	g						
Cystine	g						
Phenylalanine	g						
Tyrosine	g						
Valine	g						
Arginine	g						
Histidine	g						
Alanine	g						
Aspartic acid	g						
Glutamic acid	g						
Glycine	g						
Proline	g						
Serine	g						

¹ Value from U.S. Dept. Agr., Agr. Handb. 8 (rev. 1963).

Brazilnuts, dried, unblanched
Bertholletia excelsa

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Shells 52%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c = 140 g ²		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.34	0.537	6	0.95 186	4.67 919	
Food energy	{ kcal	656			780	1,428 5,976	
	kj	2,745					
Protein (Nx 5.46)	g	14.34	0.458	6	4.07 18.81	20.08 92.71	
Total lipid (fat)	g	66.22	1.301	6	3.64 17.92	31.22 144.16 27.87	
Carbohydrate, total	g	12.80				4.98	
Fiber	g	2.29	0.174	3	0.65 0.94	3.20 4.62	
Ash	g	3.30	0.116	5		7.19	
MINERALS:							
Calcium	mg	176		1	50 0.97	246 4.76	
Iron	mg	3.40		1	64	315 490	
Magnesium	mg	225		1	170	840 1,306	
Phosphorus	mg	600		1	170	840 1,306	
Potassium	mg	600		1	0	2 3	
Sodium	mg	2					
Zinc	mg	4.59	0.485	2	1.30	6.42	
Copper	mg	1.770		1	0.503	2.478	
Manganese ³	mg	0.774			0.220	1.084	
VITAMINS:							
Ascorbic acid	mg	0.7			0.2	1.0	
Thiamin	mg	1.000		1	0.284	1.400	
Riboflavin	mg	0.122			0.035	0.171	
Niacin	mg	1.622			0.461	2.271	
Pantothenic acid	mg	0.236			0.067	0.330	
Vitamin B ₆	mg	0.251	0.001	2	0.071	0.351	
Folacin	mcg	4.0		1	1.1	5.6	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	16.154			4.588	22,616	
4:0	g					35.167	
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.620		2	0.176	0.868	
16:0	g	9.519		8	2.703	13.327	
18:0	g	5.679		7	1.613	7.951	
Monounsaturated, total	g	23.016			6.537	32.222	
16:1	g	0.324		6	0.092	0.454	
18:1	g	22.382		9	6.356	31.335	
20:1	g	0.062		1	0.018	0.087	
22:1	g					0.135	
Polyunsaturated, total	g	24.129			6.853	33.781	
18:2	g	23.807		9	6.761	33.330	
18:3	g	0.062		1	0.018	0.087	
18:4	g					0.135	
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg					0	
AMINO ACIDS:							
Tryptophan	g	0.260		1	0.074	0.364	
Threonine	g	0.460		1	0.131	0.644	
Isoleucine	g	0.601		1	0.171	0.841	
Leucine	g	1.187		1	0.337	1.662	
Lysine	g	0.541		1	0.154	0.757	
Methionine	g	1.014		1	0.288	1.420	
Cystine	g	0.349		1	0.099	0.489	
Phenylalanine	g	0.746		1	0.212	1.044	
Tyrosine	g	0.457		1	0.130	0.640	
Valine	g	0.911		1	0.259	1.275	
Arginine	g	2.390		1	0.679	3.346	
Histidine	g	0.402		1	0.114	0.563	
Alanine	g	0.570		1	0.162	0.798	
Aspartic acid	g	1.355		1	0.385	1.897	
Glutamic acid	g	3.151		1	0.895	4.411	
Glycine	g	0.657		1	0.187	0.920	
Proline	g	0.762		1	0.216	1.067	
Serine	g	0.746		1	0.212	1.044	

¹ 1 oz = approx. 6 extra large, 6 large, or 8 medium size kernels.

² 1 cup = approx. 32 large kernels.

³ Alpha-tocopherol = 7.60 mg per 100 g.

Butternuts, dried
Juglans cinerea

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Shells 73%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.34	0.330	4	0.95	4.09	
Food energy	{ kcal	612		174		750	
	kJ	2,562		728		3,136	
Protein (N X 5.30)	g	24.90	1.353	6	7.07	30.48	
Total lipid (fat)	g	56.98	0.540	12	16.18	69.75	
Carbohydrate, total	g	12.05			3.42	14.75	
Fiber	g	1.87	0.133	4	0.53	2.28	
Ash	g	2.73	0.215	4	0.77	3.34	
MINERALS:							
Calcium	mg	53	1.808	4	15	65	
Iron	mg	4.02	0.197	4	1.14	4.92	
Magnesium	mg	237	15.785	4	67	290	
Phosphorus	mg	446	37.420	4	127	546	
Potassium	mg	421	16.561	4	119	515	
Sodium	mg	1	0.136	4	0	1	
Zinc	mg	3.13	0.454	4	0.89	3.83	
Copper	mg	0.450	0.061	4	0.128	0.551	
Manganese	mg	6.560	0.437	4	1.863	8.029	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	1.306		0.371		1.599	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.872		1	0.248	1.067	
18:0	g	0.425		1	0.121	0.520	
Monounsaturated, total	g	10.425			2.961	12.760	
16:1	g						
18:1	g	10.352		2	2.940	12.671	
20:1	g						
22:1	g						
Polyunsaturated, total	g	42.741			12.138	52.315	
18:2	g	33.727		2	9.578	41.282	
18:3	g	8.718		2	2.476	10.671	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.366		4	0.104	0.448	
Threonine	g	0.940		2	0.267	1.151	
Isoleucine	g	1.179		2	0.335	1.443	
Leucine	g	2.199		2	0.625	2.692	
Lysine	g	0.770		2	0.219	0.942	
Methionine	g	0.611		6	0.174	0.748	
Cystine	g	0.484		6	0.137	0.592	
Phenylalanine	g	1.442		2	0.410	1.765	
Tyrosine	g	0.977		2	0.277	1.196	
Valine	g	1.541		2	0.438	1.886	
Arginine	g	4.862		2	1.381	5.951	
Histidine	g	0.808		2	0.229	0.989	
Alanine	g	1.372		2	0.390	1.679	
Aspartic acid	g	3.096		2	0.879	3.790	
Glutamic acid	g	6.084		2	1.728	7.447	
Glycine	g	1.508		2	0.428	1.846	
Proline	g	1.236		2	0.351	1.513	
Serine	g	1.640		2	0.466	2.007	

Cashew Nuts, dry roasted
Anacardium occidentale

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean A	Standard error B	Number of samples C	Approximate measure and weight 1 oz = 28.4 g			
				E 1 c wholes and halves = 137 g	F		
PROXIMATE:							
Water	g	1.70	0.700	2	0.48	2.33	7.71
Food energy	kcal	574			163	787	2,604
	kJ	2,402			682	3,291	10,896
Protein (N X 5.30)	g	15.31	1.399	2	4.35	20.97	69.43
Total lipid (fat)	g	46.35	0.350	2	13.16	63.50	210.24
Carbohydrate, total	g	32.69			9.29	44.79	148.30
Fiber	g	0.70		1	0.20	0.96	3.18
Ash	g	3.95	0.350	2	1.12	5.41	17.92
MINERALS:							
Calcium	mg	45		1	13	62	204
Iron	mg	6.00		1	1.70	8.22	27.22
Magnesium	mg	260		1	74	356	1,179
Phosphorus	mg	490		1	139	671	2,223
Potassium	mg	565	105.000	2	160	774	2,563
Sodium ¹	mg	16			4	21	71
Zinc	mg	5.60		1	1.59	7.67	25.40
Copper	mg	2.220			0.630	3.041	10.070
Manganese	mg						
VITAMINS:	²						
Ascorbic acid	mg	0.0			0.0	0.0	0.0
Thiamin	mg	0.200		1	0.057	0.274	0.907
Riboflavin	mg	0.200		1	0.057	0.274	0.907
Niacin	mg	1.400		1	0.398	1.918	6.350
Pantothenic acid	mg	1.217			0.346	1.667	5.520
Vitamin B ₆	mg	0.256			0.073	0.351	1.161
Folacin	mcg	69.2			19.7	94.8	314.0
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{RE, IU	0			0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	9.157			2.601	12.545	41.536
4:0	g						
6:0	g						
8:0	g	0.132		1	0.037	0.181	0.599
10:0	g	0.132		1	0.037	0.181	0.599
12:0	g	0.784		2	0.223	1.074	3.556
14:0	g	0.347		3	0.099	0.475	1.574
16:0	g	4.351		20	1.236	5.961	19.736
18:0	g	2.972		20	0.844	4.072	13.481
Monounsaturated, total	g	27.317			7.758	37.424	123.910
16:1	g	0.318		13	0.090	0.436	1.442
18:1	g	26.808		21	7.613	36.727	121.601
20:1	g	0.139		4	0.039	0.190	0.631
Polyunsaturated, total	g	7.836			2.225	10.735	35.544
18:2	g	7.660		22	2.175	10.494	34.746
18:3	g	0.161		8	0.046	0.221	0.730
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg	158			45	216	717
AMINO ACIDS:							
Tryptophan	g	0.237		5	0.067	0.325	1.075
Threonine	g	0.592		10	0.168	0.811	2.685
Isoleucine	g	0.731		9	0.208	1.001	3.316
Leucine	g	1.285		10	0.365	1.760	5.829
Lysine	g	0.817		10	0.232	1.119	3.706
Methionine	g	0.274		10	0.078	0.375	1.243
Cystine	g	0.283		10	0.080	0.388	1.284
Phenylalanine	g	0.791		10	0.225	1.084	3.588
Tyrosine	g	0.491		10	0.139	0.673	2.227
Valine	g	1.040		10	0.295	1.425	4.717
Arginine	g	1.741		10	0.494	2.385	7.897
Histidine	g	0.399		10	0.113	0.547	1.810
Alanine	g	0.702		10	0.199	0.962	3.184
Aspartic acid	g	1.505		10	0.427	2.062	6.827
Glutamic acid	g	3.624		10	1.029	4.965	16.438
Glycine	g	0.803		10	0.228	1.100	3.642
Proline	g	0.690		10	0.196	0.945	3.130
Serine	g	0.849		10	0.241	1.163	3.851

¹ Value based on data for product without added salt. Product with added salt contains 640 mg sodium per 100 g.

² Alpha-tocopherol = 0.57 mg per 100 g.

Cashew Nuts, oil roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c Wholes and halves = 130 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.91	0.477	7	1.11 163	5.08 748	
Food energy	{ kcal kJ	576 2,409			3,131	2,611 10,926	
Protein (N X 5.30)	g	16.15	0.445	7	4.59 13.69	21.00 62.68	
Total lipid (fat)	g	48.21	0.641	7	8.10	37.08	
Carbohydrate, total	g	28.52			0.36	129.37	
Fiber	g	1.27	0.318	3	1.65	5.75	
Ash	g	3.21	0.604	6	4.17	14.54	
MINERALS:							
Calcium	mg	41	2.646	3	12	186	
Iron	mg	4.10	0.493	3	1.16	18.60	
Magnesium	mg	255			72	1,158	
Phosphorus	mg	426	8.988	3	121	1,934	
Potassium	mg	530			151	2,404	
Sodium ²	mg	17			5	78	
Zinc	mg	4.75	0.370	2	1.35	21.55	
Copper	mg	2.170		1	0.616	9.843	
Manganese	mg	0.807			0.229	3.661	
VITAMINS:							
Ascorbic acid	mg	0.0	0.000	2	0.0	0.0	
Thiamin	mg	0.424	0.076	4	0.120	1.923	
Riboflavin	mg	0.175	0.055	2	0.050	0.794	
Niacin	mg	1.800	0.300	2	0.511	8.165	
Pantothenic acid	mg	1.190		1	0.338	5.398	
Vitamin B ₆	mg	0.250		1	0.071	1.134	
Folacin	mcg	67.7	5.578	5	19.2	307.0	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	0	0.000	2	0	0	
	IU	0	0.000	2	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	9.526			2.705	12.384	
4:0	g					43.210	
6:0	g						
8:0	g	0.137			0.039	0.621	
10:0	g	0.137			0.039	0.621	
12:0	g	0.816			0.232	3.701	
14:0	g	0.361			0.103	1.637	
16:0	g	4.526			1.285	20.530	
18:0	g	3.091			0.878	14.021	
Monounsaturated, total	g	28.415			8.070	36.940	
16:1	g	0.331			0.094	1.501	
18:1	g	27.886			7.920	36.252	
20:1	g	0.144			0.041	126.491	
22:1	g					0.653	
Polyunsaturated, total	g	8.152			2.315	10.598	
18:2	g	7.968			2.263	10.358	
18:3	g	0.167			0.047	0.217	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.250			0.071	0.325	
Threonine	g	0.625			0.178	2.835	
Isoleucine	g	0.771			0.219	3.497	
Leucine	g	1.356			0.385	6.151	
Lysine	g	0.862			0.245	3.910	
Methionine	g	0.289			0.082	0.376	
Cystine	g	0.299			0.085	0.389	
Phenylalanine	g	0.835			0.237	1.086	
Tyrosine	g	0.518			0.147	0.673	
Valine	g	1.097			0.312	4.976	
Arginine	g	1.837			0.522	8.333	
Histidine	g	0.420			0.119	1.905	
Alanine	g	0.740			0.210	3.357	
Aspartic acid	g	1.587			0.451	7.199	
Glutamic acid	g	3.824			1.086	17.346	
Glycine	g	0.847			0.241	1.101	
Proline	g	0.728			0.207	3.842	
Serine	g	0.896			0.254	3.302	
						4.064	

¹ 1 oz = approx. 14 large, 18 medium, or 26 small size kernels.² Value based on data for product without added salt. Product with added salt contains 626 mg sodium per 100 g.

Cashew Butter, plain

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	1 oz = 28.4 g	1 tbsp = 16 g	
				E	F	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	2.96	0.889	3	0.84	0.47
Food energy	{ kcal	587		167	94	13.41
	kJ	2,455		697	393	2,661
Protein (N X 5.30)	g	17.56	0.592	3	4.99	79.66
Total lipid (fat)	g	49.41	0.376	3	14.03	11,135
Carbohydrate, total	g	27.57			7.83	224.14
Fiber	g	0.76	0.175	3	0.22	4.41
Ash	g	2.50	0.105	3	0.71	125.03
					0.40	3.45
					0.40	11.35
MINERALS:						
Calcium	mg	43		12	7	195
Iron	mg	5.03		1.43	0.80	22.82
Magnesium	mg	258		73	41	1,169
Phosphorus	mg	457		130	73	2,073
Potassium	mg	546		155	87	2,478
Sodium ¹	mg	15		4	2	70
Zinc	mg	5.16		1.47	0.83	23.41
Copper	mg	2.190		0.622	0.350	9.934
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	0.0		0.0	0.0	0.0
Thiamin	mg	0.312		0.089	0.050	1.415
Riboflavin	mg	0.187		0.053	0.030	0.848
Niacin	mg	1.599		0.454	0.256	7.253
Pantothenic acid	mg	1.201		0.341	0.192	5.448
Vitamin B ₆	mg	0.252		0.072	0.040	1.143
Folicin	mcg	68.3		19.4	10.9	309.9
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE	0		0	0	0
	IU	0		0	0	0
LIPIDS:						
Fatty acids:						
Saturated, total	g	9.763		2.773	1.562	44.285
4:0	g					
6:0	g					
8:0	g	0.140		0.040	0.022	0.635
10:0	g	0.140		0.040	0.022	0.635
12:0	g	0.836		0.237	0.134	3.792
14:0	g	0.370		0.105	0.059	1.678
16:0	g	4.639		1.317	0.742	21.043
18:0	g	3.168		0.900	0.507	14.370
Monounsaturated, total	g	29.122		8.271	4.660	132.097
16:1	g	0.339		0.096	0.054	1.538
18:1	g	28.579		8.116	4.573	129.634
20:1	g	0.148		0.042	0.024	0.671
22:1	g					
Polyunsaturated, total	g	8.354		2.373	1.337	37.894
18:2	g	8.166		2.319	1.307	37.041
18:3	g	0.171		0.049	0.027	0.776
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.272		0.077	0.044	1.234
Threonine	g	0.679		0.193	0.109	3.080
Isoleucine	g	0.838		0.238	0.134	3.801
Leucine	g	1.475		0.419	0.236	6.691
Lysine	g	0.938		0.266	0.150	4.255
Methionine	g	0.315		0.089	0.050	1.429
Cystine	g	0.325		0.092	0.052	1.474
Phenylalanine	g	0.908		0.258	0.145	4.119
Tyrosine	g	0.563		0.160	0.090	2.554
Valine	g	1.193		0.339	0.191	5.411
Arginine	g	1.998		0.567	0.320	9.063
Histidine	g	0.457		0.130	0.073	2.073
Alanine	g	0.805		0.229	0.129	3.651
Aspartic acid	g	1.727		0.490	0.276	7.834
Glutamic acid	g	4.159		1.181	0.665	18.865
Glycine	g	0.921		0.262	0.147	4.178
Proline	g	0.792		0.225	0.127	3.593
Serine	g	0.974		0.277	0.156	4.418

¹ Value based on data for product without added salt. Product with added salt contains 614 mg sodium per 100 g.

Chestnuts, Chinese, raw
Castanea mollissima

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 16%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	43.95		1	12.48	167.45	
Food energy	{ kcal	224		64		852	
	kJ	936		266		3,564	
Protein (N X 5.30)	g	4.20	0.013	2	1.19	16.00	
Total lipid (fat)	g	1.11	0.050	2	0.32	4.23	
Carbohydrate, total	g	49.07			13.94	186.96	
Fiber	g	1.64	0.042	2	0.47	6.24	
Ash	g	1.67	0.003	2	0.47	6.35	
MINERALS:							
Calcium	mg	18	1.990	2	5	68	
Iron	mg	1.41	0.018	2	0.40	5.37	
Magnesium	mg	84	2.466	2	24	321	
Phosphorus	mg	96	1.934	2	27	364	
Potassium	mg	447	15.245	2	127	1,703	
Sodium	mg	3	0.037	2	1	13	
Zinc	mg	0.87	0.087	2	0.25	3.31	
Copper	mg	0.363	0.002	2	0.103	1.383	
Manganese	mg	1.601	0.403	2	0.455	6.100	
VITAMINS:							
Ascorbic acid	mg	36.0			10.2	137.2	
Thiamin	mg	0.160			0.045	0.610	
Riboflavin	mg	0.180			0.051	0.686	
Niacin	mg	0.800			0.227	3.048	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	20			6	77	
	IU	202			57	770	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.164			0.047	0.625	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.151		1	0.043	0.575	
18:0	g	0.011		1	0.003	0.042	
Monounsaturated, total	g	0.581			0.165	2.214	
16:1	g	0.008		2	0.002	0.030	
18:1	g	0.559		2	0.159	2.130	
20:1	g	0.010		1	0.003	0.038	
22:1	g						
Polyunsaturated, total	g	0.288			0.082	1.097	
18:2	g	0.258		2	0.073	0.983	
18:3	g	0.028		2	0.008	0.107	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.049		2	0.014	0.187	
Threonine	g	0.167		2	0.047	0.636	
Isoleucine	g	0.157		2	0.045	0.598	
Leucine	g	0.259		2	0.074	0.987	
Lysine	g	0.228		2	0.065	0.869	
Methionine	g	0.101		2	0.029	0.385	
Cystine	g	0.110		2	0.031	0.419	
Phenylalanine	g	0.190		2	0.054	0.724	
Tyrosine	g	0.125		2	0.036	0.476	
Valine	g	0.220		2	0.062	0.838	
Arginine	g	0.430		2	0.122	1.638	
Histidine	g	0.121		2	0.034	0.461	
Alanine	g	0.200		2	0.057	0.762	
Aspartic acid	g	0.852		2	0.242	3.246	
Glutamic acid	g	0.537		2	0.153	2.046	
Glycine	g	0.184		2	0.052	0.701	
Proline	g	0.162		2	0.046	0.617	
Serine	g	0.184		2	0.052	0.701	

Chestnuts, Chinese, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g			
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	8.90		2.53		40.37	
Food energy	{ kcal	363	103			1,648	
	kJ	1,521	432			6,897	
Protein (N X 5.30)	g	6.82		1.94		30.94	
Total lipid (fat)	g	1.81		0.51		8.19	
Carbohydrate, total	g	79.76		22.65		361.81	
Fiber	g	2.66		0.76		12.08	
Ash	g	2.71		0.77		12.29	
MINERALS:							
Calcium	mg	29		8		132	
Iron	mg	2.29		0.65		10.40	
Magnesium	mg	137		39		621	
Phosphorus	mg	155		44		705	
Potassium	mg	726		206		3,295	
Sodium	mg	5		2		25	
Zinc	mg	1.41		0.40		6.40	
Copper	mg	0.590		0.168		2.676	
Manganese	mg	2.601		0.739		11.798	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.266		0.076		1.207	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.246		0.070		1.116	
18:0	g	0.019		0.005		0.086	
Monounsaturated, total	g	0.945		0.268		4.287	
16:1	g	0.012		0.003		0.054	
18:1	g	0.909		0.258		4.123	
20:1	g	0.017		0.005		0.077	
22:1	g						
Polyunsaturated, total	g	0.468		0.133		2.123	
18:2	g	0.419		0.119		1.901	
18:3	g	0.045		0.013		0.204	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.080		0.023		0.363	
Threonine	g	0.272		0.077		1.234	
Isoleucine	g	0.255		0.072		1.157	
Leucine	g	0.421		0.120		1.910	
Lysine	g	0.371		0.105		1.683	
Methionine	g	0.165		0.047		0.748	
Cystine	g	0.179		0.051		0.812	
Phenylalanine	g	0.309		0.088		1.402	
Tyrosine	g	0.203		0.058		0.921	
Valine	g	0.358		0.102		1.624	
Arginine	g	0.699		0.199		3.171	
Histidine	g	0.197		0.056		0.894	
Alanine	g	0.324		0.092		1.470	
Aspartic acid	g	1.385		0.393		6.282	
Glutamic acid	g	0.873		0.248		3.960	
Glycine	g	0.299		0.085		1.356	
Proline	g	0.263		0.075		1.193	
Serine	g	0.299		0.085		1.356	

Chestnuts, Chinese, boiled and steamed

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples		
A	B	C	D	1 oz = 28.4 g	F
PROXIMATE:					
Water	g	61.57		17.49	279.30
Food energy	{ kcal	153		44	695
	kJ	641		182	2,909
Protein (N X 5.30)	g	2.88		0.82	13.05
Total lipid (fat)	g	0.76		0.22	3.46
Carbohydrate, total	g	33.64		9.55	152.60
Fiber	g	1.12		0.32	5.10
Ash	g	1.14		0.32	5.18
MINERALS:					
Calcium	mg	12		3	56
Iron	mg	0.97		0.27	4.39
Magnesium	mg	58		16	262
Phosphorus	mg	66		19	297
Potassium	mg	306		87	1,390
Sodium	mg	2		1	10
Zinc	mg	0.60		0.17	2.70
Copper	mg	0.249		0.071	1.129
Manganese	mg	1.097		0.312	4.976
VITAMINS:					
Ascorbic acid	mg				
Thiamin	mg				
Riboflavin	mg				
Niacin	mg				
Pantothenic acid	mg				
Vitamin B ₆	mg				
Folacin	mcg				
Vitamin B ₁₂	mcg	0		0	0
Vitamin A	{ RE				
	IU				
LIPIDS:					
Fatty acids:					
Saturated, total	g	0.112		0.032	0.508
4:0	g				
6:0	g				
8:0	g				
10:0	g				
12:0	g				
14:0	g				
16:0	g	0.104		0.030	0.472
18:0	g	0.008		0.002	0.036
Monounsaturated, total	g	0.399		0.113	1.810
16:1	g	0.005		0.001	0.023
18:1	g	0.383		0.109	1.737
20:1	g	0.007		0.002	0.032
22:1	g				
Polyunsaturated, total	g	0.197		0.056	0.894
18:2	g	0.177		0.050	0.803
18:3	g	0.019		0.005	0.086
18:4	g				
20:4	g				
20:5	g				
22:5	g				
22:6	g				
Cholesterol	mg	0		0	0
Phytosterols	mg				
AMINO ACIDS:					
Tryptophan	g	0.034		0.010	0.154
Threonine	g	0.115		0.033	0.522
Isoleucine	g	0.108		0.031	0.490
Leucine	g	0.178		0.051	0.807
Lysine	g	0.156		0.044	0.708
Methionine	g	0.070		0.020	0.318
Cystine	g	0.075		0.021	0.340
Phenylalanine	g	0.130		0.037	0.590
Tyrosine	g	0.086		0.024	0.390
Valine	g	0.151		0.043	0.685
Arginine	g	0.295		0.084	1.338
Histidine	g	0.083		0.024	0.376
Alanine	g	0.137		0.039	0.621
Aspartic acid	g	0.584		0.166	2.649
Glutamic acid	g	0.368		0.105	1.669
Glycine	g	0.126		0.036	0.572
Proline	g	0.111		0.032	0.503
Serine	g	0.126		0.036	0.572

Chestnuts, Chinese, roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 25%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	40.20		11.42		136.76	
Food energy	{ kcal	239		68		812	
	kJ	998		283		3,396	
Protein (N X 5.30)	g	4.48		1.27		15.23	
Total lipid (fat)	g	1.19		0.34		4.03	
Carbohydrate, total	g	52.36		14.87		178.12	
Fiber	g	1.75		0.50		5.95	
Ash	g	1.78		0.51		6.05	
MINERALS:							
Calcium	mg	19		5		65	
Iron	mg	1.50		0.43		5.12	
Magnesium	mg	90		26		306	
Phosphorus	mg	102		29		347	
Potassium	mg	477		135		1,622	
Sodium	mg	4		1		12	
Zinc	mg	0.93		0.26		3.15	
Copper	mg	0.387		0.110		1.317	
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.150		0.043		0.510	
Riboflavin	mg	0.090		0.026		0.306	
Niacin	mg	1.500		0.426		5.103	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE	1		0		2	
	IU	5		1		17	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.175		0.050		0.595	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.161		0.046		0.548	
18:0	g	0.012		0.003		0.041	
Monounsaturated, total	g	0.620		0.176		2.109	
16:1	g	0.008		0.002		0.027	
18:1	g	0.596		0.169		2.028	
20:1	g	0.011		0.003		0.037	
22:1	g						
Polyunsaturated, total	g	0.307		0.087		1.044	
18:2	g	0.275		0.078		0.936	
18:3	g	0.030		0.009		0.102	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.052		0.015		0.177	
Threonine	g	0.178		0.051		0.606	
Isoleucine	g	0.167		0.047		0.568	
Leucine	g	0.276		0.078		0.939	
Lysine	g	0.243		0.069		0.827	
Methionine	g	0.108		0.031		0.367	
Cystine	g	0.117		0.033		0.398	
Phenylalanine	g	0.203		0.058		0.691	
Tyrosine	g	0.134		0.038		0.456	
Valine	g	0.235		0.067		0.799	
Arginine	g	0.459		0.130		1.562	
Histidine	g	0.129		0.037		0.439	
Alanine	g	0.213		0.060		0.725	
Aspartic acid	g	0.909		0.258		3.092	
Glutamic acid	g	0.573		0.163		1.949	
Glycine	g	0.196		0.056		0.667	
Proline	g	0.172		0.049		0.585	
Serine	g	0.196		0.056		0.667	

Chestnuts, European, raw, unpeeled
Castanea sativa

Nutrients and units	Amount in 100 grams, edible portion ¹			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: Shells 26%	
				1 oz = 28.4 g	1 c = 145 g ¹	F	G
A	B	C	D	E	F		
PROXIMATE:							
Water	g	48.65	1.636	4	13.82	70.54	163.25
	kcal	213			60	308	714
Food energy	kJ	890			253	1,290	2,986
Protein (N X 5.30)	g	2.42	0.028	4	0.69	3.51	8.12
Total lipid (fat)	g	2.26	0.132	4	0.64	3.28	7.59
Carbohydrate, total	g	45.54			12.93	66.03	152.84
Fiber ²	g	1.71	0.199	4	0.48	2.48	5.73
Ash	g	1.13	0.037	4	0.32	1.64	3.80
MINERALS:							
Calcium	mg	27	0.664	4	8	40	91
Iron	mg	1.01	0.210	4	0.29	1.46	3.38
Magnesium	mg	32	0.968	4	9	47	108
Phosphorus	mg	93	7.461	4	26	135	312
Potassium	mg	518	29.790	4	147	751	1,738
Sodium	mg	3	0.603	4	1	4	9
Zinc	mg	0.52	0.028	4	0.15	0.76	1.76
Copper	mg	0.447	0.038	4	0.127	0.648	1.500
Manganese	mg	0.952	0.190	4	0.270	1.380	3.195
VITAMINS:							
Ascorbic acid	mg	43.0	6.880	4	12.2	62.4	144.3
Thiamin	mg	0.238	0.010	4	0.068	0.345	0.799
Riboflavin	mg	0.168	0.021	4	0.048	0.244	0.564
Niacin	mg	1.179	0.141	4	0.335	1.710	3.957
Pantothenic acid	mg	0.509	0.017	3	0.145	0.738	1.708
Vitamin B ₆	mg	0.376	0.036	5	0.107	0.545	1.262
Folacin	mcg	62.0	4.334	3	17.6	89.9	208.1
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{RE.	3	0.700	3	1	4	9
	IU	28	7.000	3	8	41	94
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.425			0.121	0.616	1.426
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.010		17	0.003	0.015	0.034
16:0	g	0.384		22	0.109	0.557	1.289
18:0	g	0.021		22	0.006	0.030	0.070
Monounsaturated, total	g	0.780			0.222	1.131	2.618
16:1	g	0.021		22	0.006	0.030	0.070
18:1	g	0.749		22	0.213	1.086	2.514
20:1	g	0.010		1	0.003	0.015	0.034
22:1	g						
Polysaturated, total	g	0.894			0.254	1.296	3.000
18:2	g	0.798		22	0.227	1.157	2.678
18:3	g	0.095		22	0.027	0.138	0.319
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg	22			6	32	74
AMINO ACIDS:							
Tryptophan	g	0.027		2	0.008	0.039	0.091
Threonine	g	0.086		2	0.024	0.125	0.289
Isoleucine	g	0.095		2	0.027	0.138	0.319
Leucine	g	0.143		2	0.041	0.207	0.480
Lysine	g	0.143		2	0.041	0.207	0.480
Methionine	g	0.057		2	0.016	0.083	0.191
Cystine	g	0.077		2	0.022	0.112	0.258
Phenylalanine	g	0.102		2	0.029	0.148	0.342
Tyrosine	g	0.067		2	0.019	0.097	0.225
Valine	g	0.135		2	0.038	0.196	0.453
Arginine	g	0.173		2	0.049	0.251	0.581
Histidine	g	0.067		2	0.019	0.097	0.225
Alanine	g	0.161		2	0.046	0.233	0.540
Aspartic acid	g	0.417		2	0.118	0.605	1.399
Glutamic acid	g	0.312		2	0.089	0.452	1.047
Glycine	g	0.124		2	0.035	0.180	0.416
Proline	g	0.127		2	0.036	0.184	0.426
Serine	g	0.121		2	0.034	0.175	0.406

¹ 1 cup = approx. 13 kernels.² Insoluble dietary fiber as determined by the neutral detergent fiber method = 9.93 g per 100 g.³ Pectin = 1.20 g per 100 g.

Chestnuts, European, raw, peeled

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight	Refuse: 0	G
A	B	C	D	E	F	
PROXIMATE:						
Water	g . . .	52.00	1	14.77		235.87
Food energy	{ kcal . . .	196		56		888
	{ kJ . . .	819		233		3,717
Protein (N X 5.30)	g . . .	1.63	1	0.46		7.38
Total lipid (fat)	g . . .	1.25	1	0.35		5.66
Carbohydrate, total	g . . .	44.17		12.54		200.33
Fiber	g . . .	0.96		0.27		4.35
Ash	g . . .	0.96	1	0.27		4.35
MINERALS:						
Calcium	mg . . .	19	1	5		87
Iron	mg . . .	0.94		0.27		4.26
Magnesium	mg . . .	30		9		137
Phosphorus	mg . . .	38	1	11		174
Potassium	mg . . .	484		137		2,196
Sodium	mg . . .	2		1		11
Zinc	mg . . .	0.49		0.14		2.22
Copper	mg . . .	0.418		0.119		1.896
Manganese	mg . . .	0.336	1	0.095		1.524
VITAMINS:						
Ascorbic acid	mg . . .					
Thiamin	mg . . .	0.144	1	0.041		0.653
Riboflavin	mg . . .	0.016	1	0.005		0.073
Niacin	mg . . .					
Pantothenic acid	mg . . .					
Vitamin B ₆	mg . . .					
Folacin	mcg . . .					
Vitamin B ₁₂	mcg . . .					
Vitamin A	{ RE . . .	0		0		0
	{ IU . . .					
LIPIDS:						
Fatty acids:						
Saturated, total	g . . .	0.235		0.067		1.066
4:0	g . . .					
6:0	g . . .					
8:0	g . . .					
10:0	g . . .					
12:0	g . . .					
14:0	g . . .	0.005		0.001		0.023
16:0	g . . .	0.212		0.060		0.962
18:0	g . . .	0.012		0.003		0.054
Monounsaturated, total	g . . .	0.430		0.122		1.950
16:1	g . . .	0.012		0.003		0.054
18:1	g . . .	0.413		0.117		1.873
20:1	g . . .	0.005		0.001		0.023
22:1	g . . .					
Polysaturated, total	g . . .	0.493		0.140		2.236
18:2	g . . .	0.440		0.125		1.996
18:3	g . . .	0.053		0.015		0.240
18:4	g . . .					
20:4	g . . .					
20:5	g . . .					
22:5	g . . .					
22:6	g . . .					
Cholesterol	mg . . .	0		0		0
Phytosterols	mg . . .					
AMINO ACIDS:						
Tryptophan	g . . .	0.018		0.005		0.082
Threonine	g . . .	0.058		0.016		0.263
Isoleucine	g . . .	0.064		0.018		0.290
Leucine	g . . .	0.096		0.027		0.435
Lysine	g . . .	0.096		0.027		0.435
Methionine	g . . .	0.038		0.011		0.172
Cystine	g . . .	0.052		0.015		0.236
Phenylalanine	g . . .	0.069		0.020		0.313
Tyrosine	g . . .	0.045		0.013		0.204
Valline	g . . .	0.091		0.026		0.413
Arginine	g . . .	0.116		0.033		0.526
Histidine	g . . .	0.045		0.013		0.204
Alanine	g . . .	0.109		0.031		0.494
Aspartic acid	g . . .	0.281		0.080		1.275
Glutamic acid	g . . .	0.210		0.060		0.953
Glycine	g . . .	0.084		0.024		0.381
Proline	g . . .	0.086		0.024		0.390
Serine	g . . .	0.081		0.023		0.367

Chestnuts, European, dried, unpeeled

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Shells 20%
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	9.45	0.550	2	2.68	34.28
Food energy	{ kcal	374			106	1,357
	kj	1,565			444	5,678
Protein (N x 5.30)	g	6.39	0.111	2	1.81	23.17
Total lipid (fat)	g	4.45	0.550	2	1.26	16.14
Carbohydrate, total	g	77.31			21.96	280.50
Fiber	g	5.46	0.651	2	1.55	19.81
Ash	g	2.40		1	0.68	8.71
MINERALS:						
Calcium	mg	67	7.000	2	19	243
Iron	mg	2.38	0.520	2	0.68	8.63
Magnesium	mg	74		1	21	268
Phosphorus	mg	175	16.500	2	50	633
Potassium	mg	986		1	280	3,577
Sodium	mg	37		1	11	135
Zinc	mg	0.35		1	0.10	1.27
Copper	mg	0.650		1	0.185	2.358
Manganese	mg	1.300		1	0.369	4.716
VITAMINS:						
Ascorbic acid	mg	15.0		1	4.3	54.4
Thiamin	mg	0.295	0.005	2	0.084	1.070
Riboflavin	mg	0.360	0.040	2	0.102	1.306
Niacin	mg	0.850	0.150	2	0.241	3.084
Pantothenic acid	mg	0.897			0.255	3.254
Vitamin B ₆	mg	0.663			0.188	2.405
Folacin	mcg	109.3			31.0	396.6
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE	0		1	0	0
	IU	0		1	0	0
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.837			0.238	3.037
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.019			0.005	0.069
16:0	g	0.755			0.214	2.739
18:0	g	0.042			0.012	0.152
Monounsaturated, total	g	1.535			0.436	5.569
16:1	g	0.042			0.012	0.152
18:1	g	1.473			0.418	5.344
20:1	g	0.019			0.005	0.069
22:1	g					
Polyunsaturated, total	g	1.758			0.499	6.378
18:2	g	1.570			0.446	5.696
18:3	g	0.188			0.053	0.682
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.071			0.020	0.258
Threonine	g	0.228			0.065	0.827
Isoleucine	g	0.252			0.072	0.914
Leucine	g	0.378			0.107	1.371
Lysine	g	0.378			0.107	1.371
Methionine	g	0.151			0.043	0.548
Cystine	g	0.202			0.057	0.733
Phenylalanine	g	0.270			0.077	0.980
Tyrosine	g	0.177			0.050	0.642
Valine	g	0.357			0.101	1.295
Arginine	g	0.457			0.130	1.658
Histidine	g	0.177			0.050	0.642
Alanine	g	0.427			0.121	1.549
Aspartic acid	g	1.103			0.313	4.002
Glutamic acid	g	0.824			0.234	2.989
Glycine	g	0.329			0.093	1.194
Proline	g	0.336			0.095	1.219
Serine	g	0.319			0.091	1.157

Chestnuts, European, dried, peeled

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g			
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	9.00	1	2.56		40.82	
Food energy	{ kcal	369	105			1,675	
	kJ	1,545	439			7,010	
Protein (N X 5.30)	g	5.01	1	1.42		22.74	
Total lipid (fat)	g	3.91	1	1.11		17.75	
Carbohydrate, total	g	78.43		22.27		355.77	
Fiber	g	5.00		1.42		22.68	
Ash	g	3.64	1	1.03		16.51	
MINERALS:							
Calcium	mg	64	1	18		289	
Iron	mg	2.39		0.68		10.84	
Magnesium	mg	74		21		337	
Phosphorus	mg	137	1	39		619	
Potassium	mg	991		281		4,495	
Sodium	mg	37		11		170	
Zinc	mg	0.35		0.10		1.60	
Copper	mg	0.653		0.185		2.962	
Manganese	mg	1.183	1	0.336		5.366	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.354	1	0.101		1.606	
Riboflavin	mg	0.054	1	0.015		0.245	
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.736		0.209		3.338	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.017		0.005		0.077	
16:0	g	0.664		0.189		3.012	
18:0	g	0.037		0.011		0.168	
Monounsaturated, total	g	1.349		0.383		6.119	
16:1	g	0.037		0.011		0.168	
18:1	g	1.296		0.368		5.879	
20:1	g	0.017		0.005		0.077	
22:1	g						
Polyunsaturated, total	g	1.546		0.439		7.013	
18:2	g	1.381		0.392		6.264	
18:3	g	0.165		0.047		0.748	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.056		0.016		0.254	
Threonine	g	0.179		0.051		0.812	
Isoleucine	g	0.198		0.056		0.898	
Leucine	g	0.297		0.084		1.347	
Lysine	g	0.297		0.084		1.347	
Methionine	g	0.118		0.034		0.535	
Cystine	g	0.159		0.045		0.721	
Phenylalanine	g	0.212		0.060		0.962	
Tyrosine	g	0.139		0.039		0.631	
Valine	g	0.280		0.080		1.270	
Arginine	g	0.359		0.102		1.628	
Histidine	g	0.139		0.039		0.631	
Alanine	g	0.335		0.095		1.520	
Aspartic acid	g	0.866		0.246		3.928	
Glutamic acid	g	0.647		0.184		2.935	
Glycine	g	0.258		0.073		1.170	
Proline	g	0.264		0.075		1.198	
Serine	g	0.251		0.071		1.139	

Chestnuts, European, boiled and steamed

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	68.15		19.35		309.13
Food energy	{ kcal	131		37		596
	{ kJ	550		156		2,495
Protein (N X 5.30)	g	2.00	1	0.57		9.06
Total lipid (fat)	g	1.38	1	0.39		6.26
Carbohydrate, total	g	27.76		7.88		125.93
Fiber	g	0.70		0.20		3.18
Ash	g	0.71		0.20		3.22
MINERALS:						
Calcium	mg	46		13		209
Iron	mg	1.73		0.49		7.83
Magnesium	mg	54		15		244
Phosphorus	mg	99		28		447
Potassium	mg	715		203		3,245
Sodium	mg	27		8		122
Zinc	mg	0.25		0.07		1.15
Copper	mg	0.472		0.134		2.141
Manganese	mg	0.854		0.243		3.874
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid.	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.260		0.074		1.179
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.006		0.002		0.027
16:0	g	0.234		0.066		1.061
18:0	g	0.013		0.004		0.059
Monounsaturated, total	g	0.476		0.135		2.159
16:1	g	0.013		0.004		0.059
18:1	g	0.457		0.130		2.073
20:1	g	0.006		0.002		0.027
22:1	g					
Polysaturated, total	g	0.545		0.155		2.472
18:2	g	0.487		0.138		2.209
18:3	g	0.058		0.016		0.263
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.022		0.006		0.100
Threonine	g	0.071		0.020		0.322
Isoleucine	g	0.079		0.022		0.358
Leucine	g	0.118		0.034		0.535
Lysine	g	0.118		0.034		0.535
Methionine	g	0.047		0.013		0.213
Cystine	g	0.063		0.018		0.286
Phenylalanine	g	0.084		0.024		0.381
Tyrosine	g	0.055		0.016		0.249
Valine	g	0.112		0.032		0.508
Arginine	g	0.143		0.041		0.649
Histidine	g	0.055		0.016		0.249
Alanine	g	0.133		0.038		0.603
Aspartic acid	g	0.345		0.098		1.565
Glutamic acid	g	0.258		0.073		1.170
Glycine	g	0.103		0.029		0.467
Proline	g	0.105		0.030		0.476
Serine	g	0.100		0.028		0.454

Chestnuts, European, roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g	1 c = 143 g ¹	Refuse: Shells and skins 37%	G
A	B	C	D	E	F		
PROXIMATE:							
Water	g	40.48	1.716	4	11.50	57.88	115.65
Food energy	{ kcal	245			70	350	700
Food energy	{ kJ	1,025			291	1,465	2,928
Protein (N X 5.30)	g	3.17	0.461	4	0.90	4.53	9.05
Total lipid (fat)	g	2.20	0.132	4	0.62	3.15	6.29
Carbohydrate, total	g	52.96			15.04	75.73	151.30
Fiber ²	g	1.90		1	0.54	2.72	5.43
Ash	g	1.20	0.050	4	0.34	1.72	3.43
MINERALS:							
Calcium	mg	29	0.837	4	8	42	84
Iron	mg	0.91	0.132	4	0.26	1.30	2.59
Magnesium	mg	33	0.651	3	9	47	94
Phosphorus	mg	107	13.425	4	30	153	305
Potassium	mg	592	15.409	3	168	846	1,690
Sodium	mg	2	0.000	3	1	3	6
Zinc	mg	0.57	0.012	3	0.16	0.81	1.62
Copper	mg	0.507	0.003	3	0.144	0.725	1.448
Manganese	mg	1.180	0.222	3	0.335	1.687	3.371
VITAMINS:							
Ascorbic acid	mg	26.0	6.028	3	7.4	37.2	74.3
Thiamin	mg	0.243	0.028	4	0.069	0.347	0.694
Riboflavin	mg	0.175	0.008	4	0.050	0.250	0.500
Niacin	mg	1.342	0.162	4	0.381	1.919	3.834
Pantothenic acid	mg	0.554	0.020	3	0.157	0.792	1.583
Vitamin B ₆	mg	0.497	0.057	3	0.141	0.711	1.420
Folacin	mcg	70.0	18.500	2	19.9	100.1	200.0
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE.	2	0.960	3	1	3	7
	IU	24	9.597	3	7	35	70
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.414			0.118	0.592	1.183
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.010			0.003	0.014	0.029
16:0	g	0.373			0.106	0.533	1.066
18:0	g	0.021			0.006	0.030	0.060
Monounsaturated, total	g	0.759			0.216	1.085	2.168
16:1	g	0.021			0.006	0.030	0.060
18:1	g	0.728			0.207	1.041	2.080
20:1	g	0.010			0.003	0.014	0.029
22:1	g						
Polysaturated, total	g	0.869			0.247	1.243	2.483
18:2	g	0.776			0.220	1.110	2.217
18:3	g	0.093			0.026	0.133	0.266
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.035			0.010	0.050	0.100
Threonine	g	0.113			0.032	0.162	0.323
Isoleucine	g	0.125			0.036	0.179	0.357
Leucine	g	0.188			0.053	0.269	0.537
Lysine	g	0.188			0.053	0.269	0.537
Methionine	g	0.075			0.021	0.107	0.214
Cystine	g	0.101			0.029	0.144	0.289
Phenylalanine	g	0.134			0.038	0.192	0.383
Tyrosine	g	0.088			0.025	0.126	0.251
Valine	g	0.178			0.051	0.255	0.509
Arginine	g	0.227			0.064	0.325	0.649
Histidine	g	0.088			0.025	0.126	0.251
Alanine	g	0.212			0.060	0.303	0.606
Aspartic acid	g	0.549			0.156	0.785	1.568
Glutamic acid	g	0.410			0.116	0.586	1.171
Glycine	g	0.164			0.047	0.235	0.469
Proline	g	0.167			0.047	0.239	0.477
Serine	g	0.159			0.045	0.227	0.454

¹ 1 cup = approx. 17 kernels.² Insoluble dietary fiber as determined by the neutral detergent fiber method = 11.70 g per 100 g.³ Pectin = 1.20 g per 100 g.

Chestnuts, Japanese, raw
Castanea crenata

Nutrients and units	Amount in 100 grams, edible portion			Approximate measure and weight 1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased			
	Mean	Standard error	Number of samples						
A	B	C	D	E	F	G	Refuse: Shells 34%		
PROXIMATE:									
Water	g	61.41		17.44		183.79			
Food energy	{ kcal	154		44		462			
	kJ	646		183		1,933			
Protein (N X 5.30)	g	2.25		0.64		6.74			
Total lipid (fat)	g	0.53		0.15		1.59			
Carbohydrate, total	g	34.91		9.91		104.47			
Fiber	g	0.97		0.28		2.91			
Ash	g	0.91		0.26		2.71			
MINERALS:									
Calcium	mg	31		9		92			
Iron	mg	1.45		0.41		4.34			
Magnesium	mg	49		14		148			
Phosphorus	mg	72		21		217			
Potassium	mg	329		94		986			
Sodium	mg	14		4		43			
Zinc	mg	1.10		0.31		3.30			
Copper	mg	0.562		0.160		1.682			
Manganese	mg	1.591		0.452		4.762			
VITAMINS:									
Ascorbic acid	mg	26.3		7.5		78.6			
Thiamin	mg	0.344		0.098		1.030			
Riboflavin	mg	0.163		0.046		0.488			
Niacin	mg	1.500		0.426		4.490			
Pantothenic acid.	mg	0.206		0.059		0.617			
Vitamin B ₆	mg								
Folacin	mcg								
Vitamin B ₁₂	mcg	0		0		0			
Vitamin A	{ RE	4		1		11			
	IU	37		10		110			
LIPIDS:									
Fatty acids:									
Saturated, total	g	0.078		0.022		0.233			
4:0	g								
6:0	g								
8:0	g								
10:0	g								
12:0	g								
14:0	g								
16:0	g	0.072		1	0.020	0.215			
18:0	g	0.005		1	0.001	0.015			
Monounsaturated, total	g	0.278			0.079	0.832			
16:1	g	0.004		2	0.001	0.012			
18:1	g	0.268		2	0.076	0.802			
20:1	g	0.005		1	0.001	0.015			
22:1	g								
Polyunsaturated, total	g	0.138			0.039	0.413			
18:2	g	0.123		2	0.035	0.368			
18:3	g	0.013		2	0.004	0.039			
18:4	g								
20:4	g								
20:5	g								
22:5	g								
22:6	g								
Cholesterol	mg	0		0		0			
Phytosterols	mg								
AMINO ACIDS:									
Tryptophan	g	0.032		4	0.009	0.096			
Threonine	g	0.090		4	0.026	0.269			
Isoleucine	g	0.111		4	0.032	0.332			
Leucine	g	0.139		4	0.039	0.416			
Lysine	g	0.147		4	0.042	0.440			
Methionine ¹	g	0.054			0.015	0.162			
Cystine ¹	g	0.065			0.018	0.195			
Phenylalanine	g	0.088		4	0.025	0.263			
Tyrosine ¹	g	0.064			0.018	0.192			
Valine	g	0.134		4	0.038	0.401			
Arginine	g	0.148		4	0.042	0.443			
Histidine	g	0.056		4	0.016	0.168			
Alanine	g	0.203		4	0.058	0.608			
Aspartic acid	g	0.474		4	0.135	1.419			
Glutamic acid	g	0.429		4	0.122	1.284			
Glycine	g	0.114		4	0.032	0.341			
Proline	g	0.141		4	0.040	0.422			
Serine	g	0.110		4	0.031	0.329			

¹ Value based on data for Chinese and European chestnuts.

Chestnuts, Japanese, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Shells 34%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 155 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	9.96		2.83	15.44	29.81	
Food energy	{ kcal	360	102	558	1,078		
	kJ	1,506	428	2,335	4,509		
Protein (N X 5.30)	g	5.25		1.49	8.14	15.73	
Total lipid (fat)	g	1.24		0.35	1.92	3.71	
Carbohydrate, total	g	81.43		23.13	126.22	243.73	
Fiber	g	2.27		0.64	3.51	6.79	
Ash	g	2.11		0.60	3.28	6.32	
MINERALS:							
Calcium	mg	72		20	111	215	
Iron	mg	3.38		0.96	5.24	10.12	
Magnesium	mg	115		33	178	344	
Phosphorus	mg	169		48	262	506	
Potassium	mg	768		218	1,191	2,300	
Sodium	mg	34		10	52	101	
Zinc	mg	2.57		0.73	3.98	7.69	
Copper	mg	1.312		0.373	2.034	3.927	
Manganese	mg	3.711		1.054	5.752	11.107	
VITAMINS:							
Ascorbic acid	mg	61.3		17.4	95.0	183.5	
Thiamin	mg	0.802		0.228	1.243	2.400	
Riboflavin	mg	0.380		0.108	0.589	1.137	
Niacin	mg	3.500		0.994	5.425	10.476	
Pantothenic acid	mg	0.481		0.137	0.746	1.440	
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	9		2	13	26	
	IU	86		24	133	256	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.183		0.052	0.284	0.548	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.169		0.048	0.262	0.506	
18:0	g	0.013		0.004	0.020	0.039	
Monounsaturated, total	g	0.650		0.185	1.008	1.946	
16:1	g	0.008		0.002	0.012	0.024	
18:1	g	0.624		0.177	0.967	1.868	
20:1	g	0.012		0.003	0.019	0.036	
22:1	g						
Polyunsaturated, total	g	0.322		0.091	0.499	0.964	
18:2	g	0.288		0.082	0.446	0.862	
18:3	g	0.031		0.009	0.048	0.093	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.075		0.021	0.116	0.225	
Threonine	g	0.210		0.060	0.326	0.629	
Isoleucine	g	0.258		0.073	0.400	0.772	
Leucine	g	0.325		0.092	0.504	0.973	
Lysine	g	0.342		0.097	0.530	1.024	
Methionine ¹	g	0.126		0.036	0.195	0.377	
Cystine ¹	g	0.153		0.043	0.237	0.458	
Phenylalanine	g	0.205		0.058	0.318	0.614	
Tyrosine ¹	g	0.150		0.043	0.233	0.449	
Valine	g	0.312		0.089	0.484	0.934	
Arginine	g	0.345		0.098	0.535	1.033	
Histidine	g	0.131		0.037	0.203	0.392	
Alanine	g	0.473		0.134	0.733	1.416	
Aspartic acid	g	1.106		0.314	1.714	3.310	
Glutamic acid	g	1.001		0.284	1.552	2.997	
Glycine	g	0.267		0.076	0.414	0.799	
Proline	g	0.328		0.093	0.508	0.982	
Serine	g	0.257		0.073	0.398	0.769	

¹ Value based on data for Chinese and European chestnuts.

Chestnuts, Japanese, boiled and steamed

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
	A	B	C	D	E	F	G
PROXIMATE:				1 oz = 28.4 g		
Water	g	86.03		24.43		390.22
		56		16		253
Food energy	{ kcal	234		66		1,060
	{ kJ					3.70
Protein (N X 5.30)	g	0.82		0.23		0.88
Total lipid (fat)	g	0.19		0.05		57.32
Carbohydrate, total	g	12.64		3.59		1.60
Fiber	g	0.35		0.10		1.49
Ash	g	0.33		0.09		
MINERALS:						
Calcium	mg	11		3		51
Iron	mg	0.53		0.15		2.38
Magnesium	mg	18		5		81
Phosphorus	mg	26		7		119
Potassium	mg	119		34		541
Sodium	mg	5		1		24
Zinc	mg	0.40		0.11		1.81
Copper	mg	0.204		0.058		0.925
Manganese	mg	0.576		0.164		2.613
VITAMINS:						
Ascorbic acid	mg	9.5		2.7		43.1
Thiamin	mg	0.125		0.036		0.567
Riboflavin	mg	0.059		0.017		0.268
Niacin	mg	0.543		0.154		2.463
Pantothenic acid	mg	0.075		0.021		0.340
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE	1		0		6
	{ IU	13		4		60
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.028		0.008		0.127
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	0.026		0.007		0.118
18:0	g	0.002		0.001		0.009
Monounsaturated, total	g	0.101		0.029		0.458
16:1	g	0.001		0.000		0.005
18:1	g	0.097		0.028		0.440
20:1	g	0.002		0.001		0.009
22:1	g					
Polyunsaturated, total	g	0.050		0.014		0.227
18:2	g	0.045		0.013		0.204
18:3	g	0.005		0.001		0.023
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.012		0.003		0.054
Threonine	g	0.033		0.009		0.150
Isoleucine	g	0.040		0.011		0.181
Leucine	g	0.051		0.014		0.231
Lysine	g	0.053		0.015		0.240
Methionine ¹	g	0.020		0.006		0.091
Cystine ¹	g	0.024		0.007		0.109
Phenylalanine	g	0.032		0.009		0.145
Tyrosine ¹	g	0.023		0.007		0.104
Valine	g	0.049		0.014		0.222
Arginine	g	0.054		0.015		0.245
Histidine	g	0.020		0.006		0.091
Alanine	g	0.073		0.021		0.331
Aspartic acid	g	0.172		0.049		0.780
Glutamic acid	g	0.156		0.044		0.708
Glycine	g	0.041		0.012		0.186
Proline	g	0.051		0.014		0.231
Serine	g	0.040		0.011		0.181

¹ Value based on data for Chinese and European chestnuts.

Chestnuts, Japanese, roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	49.90	14.001	2	14.17	226.35	
Food energy	{ kcal	201		57		910	
Food energy	{ kJ	840		238		3,809	
Protein (N X 5.30)	g	2.97		0.84		13.46	
Total lipid (fat)	g	0.80		0.23		3.63	
Carbohydrate, total	g	45.13		12.82		204.72	
Fiber	g	1.10		0.31		4.99	
Ash	g	1.20		0.34		5.44	
MINERALS:							
Calcium	mg	35		10		159	
Iron	mg	2.10		0.60		9.53	
Magnesium	mg	64		18		290	
Phosphorus	mg	93		26		422	
Potassium	mg						
Sodium	mg						
Zinc	mg	1.43		0.41		6.48	
Copper	mg	0.730		0.207		3.311	
Manganese	mg	2.065		0.586		9.367	
VITAMINS:							
Ascorbic acid	mg	28.0		8.0		127.0	
Thiamin	mg	0.450		0.128		2.041	
Riboflavin	mg	0.230		0.065		1.043	
Niacin	mg	0.700		0.199		3.175	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE	7		2		34	
Vitamin A	{ IU	74		21		336	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.118		0.034		0.535	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.109		0.031		0.494	
18:0	g	0.008		0.002		0.036	
Monounsaturated, total	g	0.419		0.119		1.901	
16:1	g	0.005		0.001		0.023	
18:1	g	0.402		0.114		1.823	
20:1	g	0.007		0.002		0.032	
22:1	g						
Polyunsaturated, total	g	0.207		0.059		0.939	
18:2	g	0.186		0.053		0.844	
18:3	g	0.020		0.006		0.091	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.043		0.012		0.195	
Threonine	g	0.119		0.034		0.540	
Isoleucine	g	0.146		0.041		0.662	
Leucine	g	0.184		0.052		0.835	
Lysine	g	0.193		0.055		0.875	
Methionine ¹	g	0.071		0.020		0.322	
Cystine ¹	g	0.086		0.024		0.390	
Phenylalanine	g	0.116		0.033		0.526	
Tyrosine ¹	g	0.085		0.024		0.386	
Valine	g	0.176		0.050		0.798	
Arginine	g	0.195		0.055		0.885	
Histidine	g	0.074		0.021		0.336	
Alanine	g	0.267		0.076		1.211	
Aspartic acid	g	0.625		0.178		2.835	
Glutamic acid	g	0.566		0.161		2.567	
Glycine	g	0.151		0.043		0.685	
Proline	g	0.185		0.053		0.839	
Serine	g	0.145		0.041		0.658	

¹ Value based on data for Chinese and European chestnuts.

NUTS

Coconut Meat, raw¹
Cocos nucifera

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells (brown), skin, water 48%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 piece = 45 g ²	1 c shredded or grated = 80 g ³		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	46.99	1.067	15	21.15 159	37.59 283	
Food energy	{ kcal kj	354 1,480			666	1,184	
Protein (N x 5.30)	g	3.33	0.217	12	1.50	2.66	
Total lipid (fat)	g	33.49	1.409	12	15.07	26.79	
Carbohydrate, total	g	15.23			6.85	12.18	
Fiber	g	4.27	0.293	4	1.92	3.41	
Ash	g	0.97	0.083	10	0.43	0.77	
MINERALS:							
Calcium	mg	14	2.600	5	6	12	
Iron	mg	2.43	0.253	4	1.09	1.94	
Magnesium	mg	32	2.800	2	14	26	
Phosphorus	mg	113	13.483	5	51	90	
Potassium	mg	356	13.650	2	160	285	
Sodium	mg	20	0.050	2	9	16	
Zinc	mg	1.10	0.264	3	0.50	0.88	
Copper	mg	0.435	0.065	2	0.196	0.348	
Manganese	mg	1.500		1	0.675	1.200	
VITAMINS:⁴							
Ascorbic acid	mg	3.3	1.267	3	1.5	2.6	
Thiamin	mg	0.066	0.016	4	0.030	0.053	
Riboflavin	mg	0.020	0.006	3	0.009	0.016	
Niacin	mg	0.540			0.243	0.432	
Pantothenic acid	mg	0.300		1	0.135	0.240	
Vitamin B ₆	mg	0.054	0.016	3	0.024	0.043	
Folacin	mcg	26.4	4.300	4	11.9	21.1	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	0		1	0	0	
	{ IU	0		1	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	29.698			13.364	23.758	
4:0	g					70.028	
6:0	g	0.191		26	0.086	0.153	
8:0	g	2.346		126	1.056	1.877	
10:0	g	1.864		129	0.839	1.491	
12:0	g	14.858		130	6.686	11.886	
14:0	g	5.866		132	2.640	4.693	
16:0	g	2.839		132	1.278	2.271	
18:0	g	1.734		132	0.780	1.387	
Monounsaturated, total	g	1.425			0.641	1.140	
16:1	g					3.360	
18:1	g	1.425		132	0.641	1.140	
20:1	g					3.360	
22:1	g						
Polyunsaturated, total	g	0.366			0.165	0.293	
18:2	g	0.366		130	0.165	0.293	
18:3	g					0.863	
18:4	g					0.863	
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg	47			21	38	
AMINO ACIDS:							
Tryptophan	g	0.039		7	0.018	0.031	
Threonine	g	0.121		26	0.054	0.097	
Isoleucine	g	0.131		26	0.059	0.105	
Leucine	g	0.247		26	0.111	0.198	
Lysine	g	0.147		26	0.066	0.118	
Methionine	g	0.062		25	0.028	0.050	
Cystine	g	0.066		7	0.030	0.053	
Phenylalanine	g	0.169		26	0.076	0.135	
Tyrosine	g	0.103		23	0.046	0.082	
Valine	g	0.202		26	0.091	0.162	
Arginine	g	0.546		26	0.246	0.437	
Histidine	g	0.077		24	0.035	0.062	
Alanine	g	0.170		23	0.077	0.136	
Aspartic acid	g	0.325		23	0.146	0.260	
Glutamic acid	g	0.761		23	0.342	0.609	
Glycine	g	0.158		23	0.071	0.126	
Proline	g	0.138		23	0.062	0.110	
Serine	g	0.172		23	0.077	0.138	

¹ Mature kernel.² 2 x 2 x 1/2 in piece.³ Spooned into cup, not packed. 1 cup packed = 130 g.⁴ Alpha-tocopherol = 0.73 mg per 100 g.

Coconut Meat, dried (desiccated), creamed¹ ²

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples		
A	B	C	D	E	F
PROXIMATE:				1 oz = 28.4 g	G
Water	g	1.67		0.47	7.56
Food energy	{ kcal	684		194	3,103
	kJ	2,863		813	12,984
Protein (Nx 5.30)	g	5.30		1.51	24.04
Total lipid (fat)	g	69.08		19.62	313.35
Carbohydrate, total	g	21.52		6.11	97.60
Fiber	g	3.94		1.12	17.85
Ash	g	2.44		0.69	11.05
MINERALS:					
Calcium	mg	26		7	118
Iron	mg	3.36		0.95	15.24
Magnesium	mg	92		26	417
Phosphorus	mg	209		59	948
Potassium	mg	551		156	2,499
Sodium	mg	37		11	168
Zinc	mg	2.04		0.58	9.26
Copper	mg	0.807		0.229	3.661
Manganese	mg	2.783		0.790	12.624
VITAMINS:					
Ascorbic acid	mg				
Thiamin	mg				
Riboflavin	mg				
Niacin	mg				
Pantothenic acid	mg				
Vitamin B ₆	mg				
Folacin	mcg				
Vitamin B ₁₂	mcg	0		0	0
Vitamin A	{ RE				
	IU				
LIPIDS:					
Fatty acids:					
Saturated, total	g	61.257		17.397	277.862
4:0	g				
6:0	g	0.393		0.112	1.783
8:0	g	4.840		1.375	21.954
10:0	g	3.846		1.092	17.445
12:0	g	30.646		8.703	139.010
14:0	g	12.100		3.436	54.886
16:0	g	5.856		1.663	26.563
18:0	g	3.577		1.016	16.225
Monounsaturated, total	g	2.939		0.835	13.331
16:1	g				
18:1	g	2.939		0.835	13.331
20:1	g				
22:1	g				
Polyunsaturated, total	g	0.756		0.215	3.429
18:2	g	0.756		0.215	3.429
18:3	g				
18:4	g				
20:4	g				
20:5	g				
22:5	g				
22:6	g				
Cholesterol	mg	0		0	0
Phytosterols	mg				
AMINO ACIDS:					
Tryptophan	g	0.062		0.018	0.281
Threonine	g	0.193		0.055	0.875
Isoleucine	g	0.208		0.059	0.943
Leucine	g	0.393		0.112	1.783
Lysine	g	0.234		0.066	1.061
Methionine	g	0.099		0.028	0.449
Cystine	g	0.105		0.030	0.476
Phenylalanine	g	0.269		0.076	1.220
Tyrosine	g	0.164		0.047	0.744
Valine	g	0.321		0.091	1.456
Arginine	g	0.870		0.247	3.946
Histidine	g	0.122		0.035	0.553
Alanine	g	0.271		0.077	1.229
Aspartic acid	g	0.518		0.147	2.350
Glutamic acid	g	1.212		0.344	5.498
Glycine	g	0.251		0.071	1.139
Proline	g	0.219		0.062	0.993
Serine	g	0.274		0.078	1.243

¹ Mature kernel.² Whipped to shortening-like consistency.

NUTS

Coconut Meat, dried (desiccated), unsweetened¹

Nutrients and units	Amount in 100 grams, edible portion			1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples				
	A	B	C	D	E	F	G
PROXIMATE:							
Water	g	3.00			0.85		13.61
Food energy	{ kcal	660			187		2,994
	kJ	2,762			784		12,528
Protein (N X 5.30)	g	6.88			1.95		31.22
Total lipid (fat)	g	64.52			18.32		292.66
Carbohydrate, total	g	23.65			6.72		107.27
Fiber	g	5.31			1.51		24.06
Ash	g	1.94			0.55		8.80
MINERALS:							
Calcium ²	mg	26			7		118
Iron ¹	mg	3.32			0.94		15.04
Magnesium ²	mg	90			26		410
Phosphorus	mg	206			59		934
Potassium	mg	543			154		2,463
Sodium	mg	37			11		168
Zinc	mg	2.01			0.57		9.13
Copper	mg	0.796			0.226		3.611
Manganese	mg	2.745			0.780		12.451
VITAMINS:							
Ascorbic acid	mg	1.5			0.4		6.8
Thiamin ²	mg	0.060			0.017		0.272
Riboflavin	mg	0.100			0.028		0.454
Niacin	mg	0.603			0.171		2.735
Pantothenic acid	mg	0.800			0.227		3.629
Vitamin B ₆	mg	0.300			0.085		1.361
Folacin	mcg	9.0			2.6		40.8
Vitamin B ₁₂	mcg	0			0		0
Vitamin A	{ RE	0			0		0
	IU	0			0		0
LIPIDS:							
Fatty acids:							
Saturated, total	g	57.218			16.250		259.541
4:0	g				0.104		1.665
6:0	g	0.367			1.284		20.503
8:0	g	4.520			1.020		16.293
10:0	g	3.592			8.130		129.843
12:0	g	28.625			3.210		51.266
14:0	g	11.302			1.553		24.807
16:0	g	5.469			0.949		15.155
18:0	g	3.341			0.780		12.451
Monounsaturated, total	g	2.745			0.780		12.451
16:1	g				0.780		12.451
18:1	g	2.745			0.780		12.451
20:1	g				0.200		3.202
22:1	g				0.200		3.202
Polyunsaturated, total	g	0.706			0.200		0
18:2	g	0.706			0.200		0
18:3	g				0		0
18:4	g				0		0
20:4	g				0		0
20:5	g				0		0
22:5	g				0		0
22:6	g				0		0
Cholesterol	mg	0			0		0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.081			0.023		0.367
Threonine	g	0.251			0.071		1.139
Isoleucine	g	0.270			0.077		1.225
Leucine	g	0.511			0.145		2.318
Lysine	g	0.304			0.086		1.379
Methionine	g	0.129			0.037		0.585
Cystine	g	0.136			0.039		0.617
Phenylalanine	g	0.349			0.099		1.583
Tyrosine	g	0.213			0.060		0.966
Valine	g	0.417			0.118		1.892
Arginine	g	1.130			0.321		5.126
Histidine	g	0.158			0.045		0.717
Alanine	g	0.352			0.100		1.597
Aspartic acid	g	0.673			0.191		3.053
Glutamic acid	g	1.574			0.447		7.140
Glycine	g	0.326			0.093		1.479
Proline	g	0.284			0.081		1.288
Serine	g	0.356			0.101		1.615

¹ Mature kernel.² Value from U.S. Dept. Agr., Agr. Handb. 8 (rev. 1963).

Coconut Meat, dried (desiccated), sweetened, flaked, canned¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				4 oz = 114 g	1 c = 77 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	23.27		26.53	17.92	105.56	
Food energy	{ kcal	443		505	341	2,011	
	kJ	1,855		2,115	1,428	8,414	
Protein (N X 5.30)	g	3.35		3.82	2.58	15.21	
Total lipid (fat)	g	31.69		36.13	24.40	143.74	
Carbohydrate, total	g	40.91		46.63	31.50	185.55	
Fiber	g	2.14		2.44	1.65	9.72	
Ash	g	0.78		0.89	0.60	3.54	
MINERALS:							
Calcium	mg	14		16	11	65	
Iron	mg	1.84		2.10	1.42	8.34	
Magnesium	mg	49		56	38	224	
Phosphorus	mg	103		117	79	466	
Potassium	mg	324		369	249	1,468	
Sodium	mg	20		23	15	90	
Zinc	mg	1.59		1.81	1.23	7.22	
Copper	mg	0.308		0.351	0.237	1.397	
Manganese	mg	2.171		2.475	1.672	9.848	
VITAMINS:							
Ascorbic acid	mg	0.0		0.0	0.0	0.0	
Thiamin	mg	0.030		0.034	0.023	0.136	
Riboflavin	mg	0.020		0.023	0.015	0.091	
Niacin	mg	0.305		0.348	0.235	1.383	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	0		0	0	0	
	IU	0		0	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	28.101		32.035	21.638	127.466	
4:0	g						
6:0	g	0.180		0.205	0.139	0.816	
8:0	g	2.220		2.531	1.709	10.070	
10:0	g	1.764		2.011	1.358	8.002	
12:0	g	14.058		16.026	10.825	63.767	
14:0	g	5.551		6.328	4.274	25.179	
16:0	g	2.686		3.062	2.068	12.184	
18:0	g	1.641		1.871	1.264	7.444	
Monounsaturated, total	g	1.348		1.537	1.038	6.115	
16:1	g						
18:1	g	1.348		1.537	1.038	6.115	
20:1	g						
22:1	g						
Polyunsaturated, total	g	0.347		0.396	0.267	1.574	
18:2	g	0.347		0.396	0.267	1.574	
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.039		0.044	0.030	0.177	
Threonine	g	0.122		0.139	0.094	0.553	
Isoleucine	g	0.132		0.150	0.102	0.599	
Leucine	g	0.249		0.284	0.192	1.129	
Lysine	g	0.148		0.169	0.114	0.671	
Methionine	g	0.063		0.072	0.049	0.286	
Cystine	g	0.066		0.075	0.051	0.299	
Phenylalanine	g	0.170		0.194	0.131	0.771	
Tyrosine	g	0.104		0.119	0.080	0.472	
Valine	g	0.203		0.231	0.156	0.921	
Arginine	g	0.551		0.628	0.424	2.499	
Histidine	g	0.077		0.088	0.059	0.349	
Alanine	g	0.172		0.196	0.132	0.780	
Aspartic acid	g	0.328		0.374	0.253	1.488	
Glutamic acid	g	0.767		0.874	0.591	3.479	
Glycine	g	0.159		0.181	0.122	0.721	
Proline	g	0.139		0.158	0.107	0.631	
Serine	g	0.173		0.197	0.133	0.785	

¹ Mature kernel.

Coconut Meat, dried (desiccated), sweetened, flaked, packaged¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				7 oz	pkg = 199 g	1 c = 74 g
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	15.61		31.07	11.55	70.82
		4.74		944	351	2,151
Food energy	{ kcal	1,984		3,948	1,468	8,999
	{ kJ					14.86
Protein (N X 5.30)	g	3.28		6.52	2.42	14.86
Total lipid (fat)	g	32.15		63.98	23.79	145.83
Carbohydrate, total	g	47.59		94.70	35.22	215.87
Fiber	g	2.09		4.17	1.55	9.49
Ash	g	1.37		2.73	1.02	6.23
MINERALS:						
Calcium	mg	14		28	10	63
Iron	mg	1.80		3.58	1.33	8.16
Magnesium	mg	48		96	36	219
Phosphorus	mg	100		200	74	455
Potassium	mg	316		629	234	1,435
Sodium	mg	256		509	189	1,160
Zinc	mg	1.75		3.48	1.30	7.94
Copper	mg	0.301		0.599	0.223	1.365
Manganese	mg	2.388		4.752	1.767	10.832
VITAMINS:						
Ascorbic acid	mg	0.0		0.0	0.0	0.0
Thiamin	mg	0.030		0.060	0.022	0.136
Riboflavin	mg	0.020		0.040	0.015	0.091
Niacin	mg	0.300		0.597	0.222	1.361
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE	0		0	0	0
	{ IU	0				
LIPIDS:						
Fatty acids:						
Saturated, total	g	28.509		56.733	21.097	129.317
4:0	g			0.364	0.135	0.830
6:0	g	0.183		4.481	1.666	10.215
8:0	g	2.252		3.562	1.325	8.119
10:0	g	1.790		28.383	10.555	64.697
12:0	g	14.263		11.206	4.167	25.542
14:0	g	5.631		5.423	2.017	12.361
16:0	g	2.725		3.313	1.232	7.552
18:0	g	1.665		2.722	1.012	6.205
Monounsaturated, total	g	1.368				
16:1	g			2.722	1.012	6.205
18:1	g	1.368				
20:1	g					
22:1	g					
Polysaturated, total	g	0.352		0.700	0.260	1.597
18:2	g	0.352		0.700	0.260	1.597
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.038		0.076	0.028	0.172
Threonine	g	0.119		0.237	0.088	0.540
Isoleucine	g	0.129		0.257	0.095	0.585
Leucine	g	0.243		0.484	0.180	1.102
Lysine	g	0.145		0.289	0.107	0.658
Methionine	g	0.061		0.121	0.045	0.277
Cystine	g	0.065		0.129	0.048	0.295
Phenylalanine	g	0.166		0.330	0.123	0.753
Tyrosine	g	0.101		0.201	0.075	0.458
Valine	g	0.198		0.394	0.147	0.898
Arginine	g	0.538		1.071	0.398	2.440
Histidine	g	0.075		0.149	0.056	0.340
Alanine	g	0.167		0.332	0.124	0.758
Aspartic acid	g	0.320		0.637	0.237	1.452
Glutamic acid	g	0.749		1.491	0.554	3.397
Glycine	g	0.155		0.308	0.115	0.703
Proline	g	0.135		0.269	0.100	0.612
Serine	g	0.169		0.336	0.125	0.767

¹ Mature kernel.

Coconut Meat, dried (desiccated), sweetened, shredded¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	7 oz pkg = 199 g	1 c shred type = 93 g ²	Refuse: 0	G
A	B	C	D	E	F		
PROXIMATE:							
Water	g	12.55		24.97	11.67		56.92
Food energy	{ kcal	501		997	466		2,273
	kj	2,096		4,172	1,950		9,509
Protein (N X 5.30)	g	2.88		5.73	2.68		13.07
Total lipid (fat)	g	35.49		70.62	33.00		160.97
Carbohydrate, total	g	47.67		94.85	44.33		216.21
Fiber	g	2.18		4.33	2.02		9.87
Ash	g	1.42		2.82	1.32		6.44
MINERALS:							
Calcium	mg	15		30	14		68
Iron	mg	1.92		3.81	1.78		8.69
Magnesium	mg	50		100	47		228
Phosphorus	mg	107		213	99		485
Potassium	mg	337		670	313		1,527
Sodium	mg	262		522	244		1,190
Zinc	mg	1.82		3.61	1.69		8.23
Copper	mg	0.313		0.623	0.291		1.420
Manganese	mg	2.475		4.925	2.302		11.227
VITAMINS:							
Ascorbic acid	mg	0.7		1.3	0.6		3.0
Thiamin	mg	0.031		0.062	0.029		0.141
Riboflavin	mg	0.020		0.040	0.019		0.091
Niacin	mg	0.474		0.943	0.441		2.150
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0		0
Vitamin A	{ RE	0		0	0		0
	IU	0		0	0		0
LIPIDS:							
Fatty acids:							
Saturated, total	g	31.468		62.621	29.265		142.739
4:0	g						
6:0	g	0.202		0.402	0.188		0.916
8:0	g	2.486		4.947	2.312		11.276
10:0	g	1.976		3.932	1.838		8.963
12:0	g	15.743		31.329	14.641		71.410
14:0	g	6.216		12.370	5.781		28.196
16:0	g	3.008		5.986	2.797		13.644
18:0	g	1.838		3.658	1.709		8.337
Monounsaturated, total	g	1.510		3.005	1.404		6.849
16:1	g						
18:1	g	1.510		3.005	1.404		6.849
20:1	g						
22:1	g						
Polyunsaturated, total	g	0.388		0.772	0.361		1.760
18:2	g	0.388		0.772	0.361		1.760
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0		0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.034		0.068	0.032		0.154
Threonine	g	0.105		0.209	0.098		0.476
Isoleucine	g	0.113		0.225	0.105		0.513
Leucine	g	0.214		0.426	0.199		0.971
Lysine	g	0.127		0.253	0.118		0.576
Methionine	g	0.054		0.107	0.050		0.245
Cystine	g	0.057		0.113	0.053		0.259
Phenylalanine	g	0.146		0.291	0.136		0.662
Tyrosine	g	0.089		0.177	0.083		0.404
Valine	g	0.175		0.348	0.163		0.794
Arginine	g	0.473		0.941	0.440		2.146
Histidine	g	0.066		0.131	0.061		0.299
Alanine	g	0.147		0.293	0.137		0.667
Aspartic acid	g	0.282		0.561	0.262		1.279
Glutamic acid	g	0.659		1.311	0.613		2.989
Glycine	g	0.137		0.273	0.127		0.621
Proline	g	0.119		0.237	0.111		0.540
Serine	g	0.149		0.297	0.139		0.676

¹ Mature kernel.² 1 cup cookie coconut = 113 g.

Coconut Meat, dried (desiccated), toasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				1 oz = 28.4 g		
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	1.00		0.28		4.54
Food energy	{ kcal	592		168		2,688
	kJ	2,479		704		11,245
Protein (N X 5.30)	g	5.30		1.51		24.04
Total lipid (fat)	g	47.00		13.35		213.19
Carbohydrate, total	g	44.40		12.61		201.40
Fiber	g	2.40		0.68		10.89
Ash	g	2.30		0.65		10.43
MINERALS:						
Calcium	mg	27		8		122
Iron	mg	3.39		0.96		15.38
Magnesium	mg	92		26		419
Phosphorus	mg	211		60		957
Potassium	mg	554		157		2,513
Sodium	mg	37		11		168
Zinc	mg	2.05		0.58		9.32
Copper	mg	0.812		0.231		3.683
Manganese	mg	2.801		0.795		12.705
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	41.678		11.837		189.051
4:0	g			0.076		1.211
6:0	g	0.267		0.935		14.937
8:0	g	3.293		0.743		11.866
10:0	g	2.616		5.922		94.580
12:0	g	20.851		2.338		37.345
14:0	g	8.233		1.131		18.071
16:0	g	3.984		0.691		11.041
18:0	g	2.434		0.568		9.067
Monounsaturated, total	g	1.999				
16:1	g			0.568		9.067
18:1	g	1.999				
20:1	g					
22:1	g					
Polyunsaturated, total	g	0.514		0.146		2.332
18:2	g	0.514		0.146		2.332
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.062		0.018		0.281
Threonine	g	0.193		0.055		0.875
Isoleucine	g	0.208		0.059		0.943
Leucine	g	0.393		0.112		1.783
Lysine	g	0.234		0.066		1.061
Methionine	g	0.099		0.028		0.449
Cystine	g	0.105		0.030		0.476
Phenylalanine	g	0.269		0.076		1.220
Tyrosine	g	0.164		0.047		0.744
Valine	g	0.321		0.091		1.456
Arginine	g	0.870		0.247		3.946
Histidine	g	0.122		0.035		0.553
Alanine	g	0.271		0.077		1.229
Aspartic acid	g	0.518		0.147		2.350
Glutamic acid	g	1.212		0.344		5.498
Glycine	g	0.251		0.071		1.139
Proline	g	0.219		0.062		0.993
Serine	g	0.274		0.078		1.243

¹ Mature kernel.

Coconut Cream, raw

Liquid expressed from grated coconut meat.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight 1 tbsp = 15 g	1 c = 240 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	53.90	1	8.09	129.36	244.49
	{ kcal	330		49	792	1,496
Food energy	{ kJ	1,380	207	3,313		6,261
Protein (N X 5.30)	g	3.63	1	0.54	8.70	16.44
Total lipid (fat)	g	34.68	1	5.20	83.23	157.31
Carbohydrate, total	g	6.65		1.00	15.95	30.14
Fiber	g					
Ash	g	1.15	1	0.17	2.76	5.22
MINERALS:						
Calcium	mg	11	1	2	26	49
Iron	mg	2.28	1	0.34	5.47	10.34
Magnesium	mg					
Phosphorus	mg	122	1	18	293	554
Potassium	mg	325		49	781	1,476
Sodium	mg	4		1	10	18
Zinc	mg	0.96		0.14	2.30	4.34
Copper	mg	0.378		0.057	0.907	1.715
Manganese	mg	1.304		0.196	3.130	5.915
VITAMINS:						
Ascorbic acid	mg	2.8	1	0.4	6.7	12.7
Thiamin	mg	0.030	1	0.005	0.072	0.136
Riboflavin	mg	0.000	1	0.000	0.000	0.000
Niacin	mg	0.890	1	0.134	2.136	4.037
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0	1	0	0	0
Vitamin A	{ RE	0	1	0	0	0
	{ IU	0				
LIPIDS:						
Fatty acids:						
Saturated, total	g	30.753		4.613	73.807	139.496
4:0	g					
6:0	g	0.197		0.030	0.473	0.894
8:0	g	2.430		0.365	5.832	11.022
10:0	g	1.931		0.290	4.634	8.759
12:0	g	15.385		2.308	36.924	69.786
14:0	g	6.075		0.911	14.580	27.556
16:0	g	2.940		0.441	7.056	13.336
18:0	g	1.796		0.269	4.310	8.147
Monounsaturated, total	g	1.475		0.221	3.540	6.691
16:1	g					
18:1	g	1.475		0.221	3.540	6.691
20:1	g					
22:1	g					
Polyunsaturated, total	g	0.379		0.057	0.910	1.719
18:2	g	0.379		0.057	0.910	1.719
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.042		0.006	0.101	0.191
Threonine	g	0.132		0.020	0.317	0.599
Isoleucine	g	0.142		0.021	0.341	0.644
Leucine	g	0.269		0.040	0.646	1.220
Lysine	g	0.160		0.024	0.384	0.726
Methionine	g	0.068		0.010	0.163	0.308
Cystine	g	0.072		0.011	0.173	0.327
Phenylalanine	g	0.184		0.028	0.442	0.835
Tyrosine	g	0.112		0.017	0.269	0.508
Valine	g	0.220		0.033	0.528	0.998
Arginine	g	0.595		0.089	1.428	2.699
Histidine	g	0.083		0.012	0.199	0.376
Alanine	g	0.185		0.028	0.444	0.839
Aspartic acid	g	0.354		0.053	0.850	1.606
Glutamic acid	g	0.829		0.124	1.990	3.760
Glycine	g	0.172		0.026	0.413	0.780
Proline	g	0.150		0.023	0.360	0.680
Serine	g	0.187		0.028	0.449	0.848

Coconut Cream, canned¹

Liquid expressed from grated coconut meat.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight 1 tbsp = 19 g	1 c = 296 g	Refuse: 0
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	71.20		13.53	210.74	322.94
	g	192		36	568	871
Food energy	{ kcal	802		152	2374	3638
	kJ					
Protein (N X 5.30)	g	2.69	1	0.51	7.97	12.21
Total lipid (fat)	g	17.72	1	3.37	52.45	80.38
Carbohydrate, total	g	8.35		1.59	24.72	37.89
Fiber	g					
Ash	g	0.04	1	0.01	0.12	0.18
MINERALS:						
Calcium	mg	1	1	0	4	6
Iron	mg	0.51	1	0.10	1.50	2.30
Magnesium	mg					
Phosphorus	mg	22	1	4	66	101
Potassium	mg	101	1	19	299	458
Sodium	mg	50	1	10	149	229
Zinc	mg	0.60		0.11	1.77	2.71
Copper	mg	0.236		0.045	0.699	1.070
Manganese	mg	0.815		0.155	2.412	3.697
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.022	1	0.004	0.065	0.100
Riboflavin	mg	0.040	1	0.008	0.118	0.181
Niacin	mg	0.038	1	0.007	0.112	0.172
Pantothenic acid	mg					
Vitamin B6	mg					
Folacin	mcg					
Vitamin B12	mcg	0		0	0	0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	15.713		2.985	46.510	71.274
4:0	g			0.019	0.299	0.458
6:0	g	0.101		0.236	3.673	5.629
8:0	g	1.241		0.187	2.919	4.472
10:0	g	0.986		1.494	23.269	35.657
12:0	g	7.861		0.590	9.188	14.080
14:0	g	3.104		0.285	4.446	6.813
16:0	g	1.502		0.174	2.717	4.164
18:0	g	0.918		0.143	2.232	3.420
Monounsaturated, total	g	0.754				
16:1	g			0.143	2.232	3.420
18:1	g	0.754				
20:1	g					
22:1	g					
Polyunsaturated, total	g	0.194		0.037	0.574	0.880
18:2	g	0.194		0.037	0.574	0.880
18:3	g					
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.031		0.006	0.092	0.141
Threonine	g	0.098		0.019	0.290	0.445
Isoleucine	g	0.106		0.020	0.314	0.481
Leucine	g	0.200		0.038	0.592	0.907
Lysine	g	0.119		0.023	0.352	0.540
Methionine	g	0.050		0.010	0.148	0.227
Cystine	g	0.053		0.010	0.157	0.240
Phenylalanine	g	0.137		0.026	0.406	0.621
Tyrosine	g	0.083		0.016	0.246	0.376
Valine	g	0.163		0.031	0.482	0.739
Arginine	g	0.442		0.084	1.308	2.005
Histidine	g	0.062		0.012	0.184	0.281
Alanine	g	0.138		0.026	0.408	0.626
Aspartic acid	g	0.263		0.050	0.778	1.193
Glutamic acid	g	0.616		0.117	1.823	2.794
Glycine	g	0.128		0.024	0.379	0.581
Proline	g	0.111		0.021	0.329	0.503
Serine	g	0.139		0.026	0.411	0.631

¹ Sweetened.

Coconut Milk, raw

Liquid expressed from mixture of grated coconut meat and water.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean A	Standard error B	Number of samples C	Approximate measure and weight 1 tbsp = 15 g E	1 c = 240 g F		
PROXIMATE:							
Water	g	67.62	3.495	3	10.14	162.29	306.72
Food energy	{ kcal	230		35	552	1,043	
	{ kJ	962		144	2,310	4,365	
Protein (N X 5.30)	g	2.29	0.429	2	0.34	5.50	10.39
Total lipid (fat)	g	23.84	1.040	2	3.58	57.22	108.14
Carbohydrate, total	g	5.54			0.83	13.28	25.11
Fiber	g						
Ash	g	0.72	0.315	2	0.11	1.72	3.24
MINERALS:							
Calcium	mg	16		1	2	39	74
Iron	mg	1.64		1	0.25	3.94	7.44
Magnesium	mg	37		1	6	89	168
Phosphorus	mg	100		1	15	240	454
Potassium	mg	263			39	630	1191
Sodium	mg	15		1	2	37	70
Zinc	mg	0.67			0.10	1.61	3.05
Copper	mg	0.266			0.040	0.638	1.207
Manganese	mg	0.916			0.137	2.198	4.155
VITAMINS:							
Ascorbic acid	mg	2.8		1	0.4	6.7	12.7
Thiamin	mg	0.026		1	0.004	0.062	0.118
Riboflavin	mg	0.000		1	0.000	0.000	0.000
Niacin	mg	0.760		1	0.114	1.824	3.447
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	0		1	0	0	0
	{ IU	0		1	0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	21.140			3.171	50.736	95.891
4:0	g				0.020	0.326	0.617
6:0	g	0.136			0.251	4.008	7.575
8:0	g	1.670			0.199	3.185	6.019
10:0	g	1.327			1.586	25.382	47.973
12:0	g	10.576			0.626	10.022	18.942
14:0	g	4.176			0.303	4.850	9.167
16:0	g	2.021			0.185	2.962	5.597
18:0	g	1.234			0.152	2.434	4.600
Monounsaturated, total	g	1.014					
16:1	g				0.152	2.434	4.600
18:1	g	1.014					
20:0	g						
22:1	g						
Polynsaturated, total	g	0.261			0.039	0.626	1.184
18:2	g	0.261			0.039	0.626	1.184
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg	1			0	2	5
AMINO ACIDS:							
Tryptophan	g	0.027			0.004	0.065	0.122
Threonine	g	0.083			0.012	0.199	0.376
Isoleucine	g	0.090			0.014	0.216	0.408
Leucine	g	0.170			0.026	0.408	0.771
Lysine	g	0.101			0.015	0.242	0.458
Methionine	g	0.043			0.006	0.103	0.195
Cystine	g	0.045			0.007	0.108	0.204
Phenylalanine	g	0.116			0.017	0.278	0.526
Tyrosine	g	0.071			0.011	0.170	0.322
Valine	g	0.139			0.021	0.334	0.631
Arginine	g	0.376			0.056	0.902	1.706
Histidine	g	0.053			0.008	0.127	0.240
Alanine	g	0.117			0.018	0.281	0.531
Aspartic acid	g	0.224			0.034	0.538	1.016
Glutamic acid	g	0.524			0.079	1.258	2.377
Glycine	g	0.108			0.016	0.259	0.490
Proline	g	0.095			0.014	0.228	0.431
Serine	g	0.118			0.018	0.283	0.535

Coconut Milk, canned

Liquid expressed from mixture of grated coconut meat and water.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight	Refuse: 0	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	72.88	8.667	3	10.93 30 124	164.70 445 1,862
Food energy	{ kcal	197				330.57 893
	kJ	824				3,738
Protein (N X 5.30)	g	2.02	0.785	3	0.30	4.56
Total lipid (fat)	g	21.33	8.350	3	3.20	48.21
Carbohydrate, total	g	2.81			0.42	6.34
Fiber	g					12.72
Ash	g	0.97		1	0.15	2.19
						4.40
MINERALS:						
Calcium	mg	18		1	3	40
Iron	mg	3.30		1	0.50	7.46
Magnesium	mg	46		1	7	104
Phosphorus	mg	96		1	14	217
Potassium	mg	220			33	497
Sodium	mg	13			2	29
Zinc	mg	0.56			0.08	1.27
Copper	mg	0.223			0.033	0.504
Manganese	mg	0.768			0.115	1.736
						3.484
VITAMINS:						
Ascorbic acid	mg	1.0		1	0.2	2.3
Thiamin	mg					4.5
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	18.915			2.837	42.748
4:0	g				0.018	0.273
6:0	g	0.121			0.224	3.376
8:0	g	1.494			0.178	2.683
10:0	g	1.187			1.419	21.386
12:0	g	9.463				42.924
14:0	g	3.736			0.560	8.443
16:0	g	1.808			0.271	4.086
18:0	g	1.104			0.166	2.495
Monounsaturated, total	g	0.907			0.136	2.050
16:1	g					4.114
18:1	g	0.907			0.136	2.050
20:1	g					4.114
22:1	g					
Polyunsaturated, total	g	0.233			0.035	0.527
18:2	g	0.233			0.035	0.527
18:3	g					1.057
18:4	g					1.057
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.024			0.004	0.054
Threonine	g	0.074			0.011	0.167
Isoleucine	g	0.079			0.012	0.179
Leucine	g	0.150			0.023	0.339
Lysine	g	0.089			0.013	0.201
Methionine	g	0.038			0.006	0.086
Cystine	g	0.040			0.006	0.090
Phenylalanine	g	0.102			0.015	0.231
Tyrosine	g	0.062			0.009	0.140
Valine	g	0.122			0.018	0.276
Arginine	g	0.331			0.050	0.748
Histidine	g	0.046			0.007	0.104
Alanine	g	0.103			0.015	0.233
Aspartic acid	g	0.197			0.030	0.445
Glutamic acid	g	0.462			0.069	1.044
Glycine	g	0.096			0.014	0.217
Proline	g	0.083			0.012	0.188
Serine	g	0.104			0.016	0.235

Coconut Milk, frozen

Liquid expressed from mixture of grated coconut meat and water.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
A	B	C	D	E	F	G	
PROXIMATE:							
Water	71.42		1	10.71	171.41	323.96	
Food energy	{ kcal	202		30	486	918	
	{ kJ	847		127	2,032	3,841	
Protein (N X 5.30)	g	1.61	1	0.24	3.87	7.31	
Total lipid (fat)	g	20.80	1	3.12	49.92	94.35	
Carbohydrate, total	g	5.58		0.84	13.39	25.31	
Fiber	g						
Ash	g	0.59	1	0.09	1.42	2.68	
MINERALS:							
Calcium	mg	4	1	1	11	20	
Iron	mg	0.81	1	0.12	1.94	3.67	
Magnesium	mg	32	1	5	77	145	
Phosphorus	mg	59	1	9	142	269	
Potassium	mg	232	1	35	556	1051	
Sodium	mg	12	1	2	29	55	
Zinc	mg	0.59		0.09	1.42	2.69	
Copper	mg	0.235		0.035	0.564	1.066	
Manganese	mg	0.809		0.121	1.942	3.670	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg						
Vitamin A	{ RE	0		0	0	0	
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	18.445		2.767	44.268	83.667	
4:0	g						
6:0	g	0.118		0.018	0.283	0.535	
8:0	g	1.457		0.219	3.497	6.609	
10:0	g	1.158		0.174	2.779	5.253	
12:0	g	9.228		1.384	22.147	41.858	
14:0	g	3.643		0.546	8.743	16.525	
16:0	g	1.763		0.264	4.231	7.997	
18:0	g	1.077		0.162	2.585	4.885	
Monounsaturated, total	g	0.885		0.133	2.124	4.014	
16:1	g						
18:1	g	0.885		0.133	2.124	4.014	
20:1	g						
22:1	g						
Polyunsaturated, total	g	0.228		0.034	0.547	1.034	
18:2	g	0.228		0.034	0.547	1.034	
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.019		0.003	0.046	0.086	
Threonine	g	0.059		0.009	0.142	0.268	
Isoleucine	g	0.063		0.009	0.151	0.286	
Leucine	g	0.119		0.018	0.286	0.540	
Lysine	g	0.071		0.011	0.170	0.322	
Methionine	g	0.030		0.005	0.072	0.136	
Cystine	g	0.032		0.005	0.077	0.145	
Phenylalanine	g	0.082		0.012	0.197	0.372	
Tyrosine	g	0.050		0.008	0.120	0.227	
Valine	g	0.098		0.015	0.235	0.445	
Arginine	g	0.264		0.040	0.634	1.198	
Histidine	g	0.037		0.006	0.089	0.168	
Alanine	g	0.082		0.012	0.197	0.372	
Aspartic acid	g	0.157		0.024	0.377	0.712	
Glutamic acid	g	0.368		0.055	0.883	1.669	
Glycine	g	0.076		0.011	0.182	0.345	
Proline	g	0.067		0.010	0.161	0.304	
Serine	g	0.083		0.012	0.199	0.376	

Coconut Water

Liquid from coconuts.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 tbsp = 15 g	1 c = 240 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	94.99	0.270	7	14.25 3 12	227.97 46 193	430.86 87 365
Food energy	{ kcal	19					
Protein (N X 5.30)	g	0.72	0.417	4	0.11	1.73	3.27
Total lipid (fat)	g	0.20	0.085	6	0.03	0.48	0.90
Carbohydrate, total	g	3.71			0.56	8.89	16.81
Fiber	g	0.02	0.000	2	0.00	0.05	0.09
Ash	g	0.39	0.082	5	0.06	0.94	1.77
MINERALS:							
Calcium	mg	24	3.347	4	4	58	109
Iron	mg	0.29	0.094	3	0.04	0.69	1.30
Magnesium	mg	25		1	4	60	113
Phosphorus	mg	20	4.800	3	3	49	93
Potassium	mg	250		1	38	600	1,134
Sodium	mg	105		1	16	252	476
Zinc	mg	0.10			0.02	0.25	0.47
Copper	mg	0.040		1	0.006	0.096	0.181
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	2.4	0.879	4	0.4	5.7	10.9
Thiamin	mg	0.030	0.022	5	0.005	0.072	0.136
Riboflavin	mg	0.057	0.044	4	0.009	0.137	0.259
Niacin	mg	0.080	0.060	3	0.012	0.192	0.363
Pantothenic acid	mg	0.043			0.006	0.103	0.195
Vitamin B ₆	mg	0.032	0.001	2	0.005	0.077	0.145
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	0		1	0	0	0
	{ IU	0		1	0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.176			0.026	0.422	0.798
4:0	g				0.000	0.002	0.005
6:0	g	0.001			0.002	0.034	0.064
8:0	g	0.014			0.002	0.026	0.050
10:0	g	0.011			0.013	0.211	0.399
12:0	g	0.088			0.005	0.084	0.159
14:0	g	0.035			0.003	0.041	0.077
16:0	g	0.017			0.002	0.024	0.045
18:0	g	0.010			0.001	0.019	0.036
Monounsaturated, total	g	0.008					
16:1	g				0.001	0.019	0.036
18:1	g	0.008					
20:1	g						
22:1	g						
Polysaturated, total	g	0.002			0.000	0.005	0.009
18:2	g	0.002			0.000	0.005	0.009
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.008			0.001	0.019	0.036
Threonine	g	0.026			0.004	0.062	0.118
Isoleucine	g	0.028			0.004	0.067	0.127
Leucine	g	0.053			0.008	0.127	0.240
Lysine	g	0.032			0.005	0.077	0.145
Methionine	g	0.013			0.002	0.031	0.059
Cystine	g	0.014			0.002	0.034	0.064
Phenylalanine	g	0.037			0.006	0.089	0.168
Tyrosine	g	0.022			0.003	0.053	0.100
Valine	g	0.044			0.007	0.106	0.200
Arginine	g	0.118			0.018	0.283	0.535
Histidine	g	0.017			0.003	0.041	0.077
Alanine	g	0.037			0.006	0.089	0.168
Aspartic acid	g	0.070			0.011	0.168	0.318
Glutamic acid	g	0.165			0.025	0.396	0.748
Glycine	g	0.034			0.005	0.082	0.154
Proline	g	0.030			0.005	0.072	0.136
Serine	g	0.037			0.006	0.089	0.168

Filberts or Hazelnuts, dried, unblanched

Corylus spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: Shells 54%	
				1 oz = 28.4 g	1 c chopped kernels = 115 g ¹		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	5.42	0.278	22	1.54 179	6.23 727	11.30 1,318
Food energy	{ kcal	632			751	3,040	5,514
	{ kJ	2,643					
Protein (N X 5.30)	g	13.04	0.931	25	3.70 17.79	14.99 72.03	27.20 130.66
Total lipid (fat)	g	62.64	0.544	21	4.35 17.60	17.60	31.92
Carbohydrate, total	g	15.30					
Fiber	g	3.80	0.625	3	1.08 1.02	4.37 4.15	7.93 7.52
Ash	g	3.61	0.436	24			
MINERALS:							
Calcium	mg	188	9.983	29	53	216	391
Iron	mg	3.27	0.085	59	0.93	3.76	6.82
Magnesium	mg	285	13.578	28	81	328	595
Phosphorus	mg	312	6.212	6	89	359	650
Potassium	mg	445	20.843	28	126	512	929
Sodium	mg	3			1	3	6
Zinc	mg	2.40	0.141	30	0.68	2.76	5.01
Copper	mg	1.509	0.058	29	0.429	1.735	3.148
Manganese	mg	2.016	0.453	28	0.573	2.318	4.205
VITAMINS: ²							
Ascorbic acid	mg	1.0		1	0.3	1.2	2.1
Thiamin	mg	0.500	0.100	2	0.142	0.575	1.043
Riboflavin	mg	0.110	0.050	2	0.031	0.127	0.229
Niacin	mg	1.135	0.165	2	0.322	1.305	2.368
Pantothenic acid	mg	1.148			0.326	1.320	2.395
Vitamin B ₆	mg	0.612			0.174	0.704	1.277
Folacin	mcg	71.8	9.063	5	20.4	82.6	149.9
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	7			2	8	14
	{ IU	67			19	77	139
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.604			1.308	5.295	9.604
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.117		6	0.033	0.135	0.244
16:0	g	3.117		36	0.885	3.585	6.502
18:0	g	1.273		36	0.362	1.464	2.655
Monounsaturated, total	g	49.088			13.941	56.451	102.398
16:1	g	0.210		17	0.060	0.242	0.438
18:1	g	48.632		37	13.811	55.927	101.446
20:1	g	0.098		5	0.028	0.113	0.204
22:1	g						
Polyunsaturated, total	g	6.003			1.705	6.903	12.522
18:2	g	5.833		37	1.657	6.708	12.168
18:3	g	0.152		9	0.043	0.175	0.317
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.216		3	0.061	0.248	0.451
Threonine	g	0.448		2	0.127	0.515	0.935
Isoleucine	g	0.568		2	0.161	0.653	1.185
Leucine	g	1.100		2	0.312	1.265	2.295
Lysine	g	0.399		2	0.113	0.459	0.832
Methionine	g	0.162		2	0.046	0.186	0.338
Cystine	g	0.229		2	0.065	0.263	0.478
Phenylalanine	g	0.686		2	0.195	0.789	1.431
Tyrosine	g	0.453		2	0.129	0.521	0.945
Valine	g	0.662		2	0.188	0.761	1.381
Arginine	g	2.155		2	0.612	2.478	4.495
Histidine	g	0.327		2	0.093	0.376	0.682
Alanine	g	0.708		2	0.201	0.814	1.477
Aspartic acid	g	1.604		2	0.456	1.845	3.346
Glutamic acid	g	3.537		2	1.005	4.068	7.378
Glycine	g	0.704		2	0.200	0.810	1.469
Proline	g	0.509		2	0.145	0.585	1.062
Serine	g	0.669		2	0.190	0.769	1.396

¹ 1 cup whole nuts = 135 g; 1 cup ground nuts = 75 g.² Alpha-tocopherol = 23.92 g per 100 g.

Filberts or Hazelnuts, dried, blanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g			
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.90	1	0.54		8.62	
Food energy	{ kcal	672	191		3,050		
	kJ	2,814	799		12,763		
Protein (N X 5.30)	g	12.72	1	3.61		57.70	
Total lipid (fat)	g	67.30	1	19.11		305.27	
Carbohydrate, total	g	15.98		4.54		72.49	
Fiber	g	1.80	1	0.51		8.16	
Ash	g	2.10	1	0.60		9.53	
MINERALS:							
Calcium	mg	195	55		882		
Iron	mg	3.39	0.96		15.39		
Magnesium	mg	296	84		1,342		
Phosphorus	mg	323	92		1,467		
Potassium	mg	462	131		2,095		
Sodium	mg	3	1		14		
Zinc	mg	2.49	0.71		11.30		
Copper	mg	1.565	0.444		7.099		
Manganese	mg	2.091	0.594		9.485		
VITAMINS:							
Ascorbic acid	mg			0.338		5.398	
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg	1.190					
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0	0		0		
Vitamin A	{ RE	7	2		31		
	IU	69	20		314		
LIPIDS:							
Fatty acids:							
Saturated, total	g	4.947	1.405		22.440		
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.125	0.036		0.567		
16:0	g	3.349	0.951		15.191		
18:0	g	1.368	0.389		6.205		
Monounsaturated, total	g	52.741	14.978		239.233		
16:1	g	0.226	0.064		1.025		
18:1	g	52.252	14.840		237.015		
20:1	g	0.105	0.030		0.476		
22:1	g						
Polyunsaturated, total	g	6.449	1.832		29.253		
18:2	g	6.267	1.780		28.427		
18:3	g	0.163	0.046		0.739		
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0	0		0		
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.211	0.060		0.957		
Threonine	g	0.437	0.124		1.982		
Isoleucine	g	0.554	0.157		2.513		
Leucine	g	1.073	0.305		4.867		
Lysine	g	0.389	0.110		1.765		
Methionine	g	0.158	0.045		0.717		
Cystine	g	0.223	0.063		1.012		
Phenylalanine	g	0.670	0.190		3.039		
Tyrosine	g	0.442	0.126		2.005		
Valine	g	0.646	0.183		2.930		
Arginine	g	2.102	0.597		9.535		
Histidine	g	0.319	0.091		1.447		
Alanine	g	0.691	0.196		3.134		
Aspartic acid	g	1.565	0.444		7.099		
Glutamic acid	g	3.451	0.980		15.654		
Glycine	g	0.686	0.195		3.112		
Proline	g	0.497	0.141		2.254		
Serine	g	0.653	0.185		2.962		

Filberts or Hazelnuts, dry roasted, unblanched

Nutrients and units	Amount in 100 grams, edible portion			Approximate measure and weight 1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased			
	Mean	Standard error	Number of samples						
A	B	C	D	E	F	G			
PROXIMATE:									
Water	g	1.90	1	0.54		8.62			
Food energy	{ kcal	662	188		3,005				
	kJ	2,772	787		12,573				
Protein (N X 5.30)	g	10.01	1	2.84		45.39			
Total lipid (fat)	g	66.30	1	18.83		300.74			
Carbohydrate, total	g	17.89		5.08		81.17			
Fiber	g	3.94		1.12		17.88			
Ash	g	3.90	1	1.11		17.69			
MINERALS:									
Calcium	mg	195		55		882			
Iron	mg	3.39		0.96		15.39			
Magnesium	mg	296		84		1,342			
Phosphorus	mg	323		92		1,467			
Potassium	mg	462		131		2,095			
Sodium ¹	mg	3		1		14			
Zinc	mg	2.49		0.71		11.30			
Copper	mg	1.565		0.444		7.099			
Manganese	mg	2.091		0.594		9.485			
VITAMINS:									
Ascorbic acid	mg								
Thiamin	mg								
Riboflavin	mg								
Niacin	mg								
Pantothenic acid	mg								
Vitamin B ₆	mg								
Folacin	mcg								
Vitamin B ₁₂	mcg	0		0		0			
Vitamin A	{ RE								
	{ IU								
LIPIDS:									
Fatty acids:									
Saturated, total	g	4.873		1.384		22.104			
4:0	g								
6:0	g								
8:0	g								
10:0	g								
12:0	g								
14:0	g	0.123		0.035		0.558			
16:0	g	3.299		0.937		14.964			
18:0	g	1.348		0.383		6.115			
Monounsaturated, total	g	51.957		14.756		235.677			
16:1	g	0.223		0.063		1.012			
18:1	g	51.475		14.619		233.491			
20:1	g	0.103		0.029		0.467			
22:1	g								
Polyunsaturated, total	g	6.354		1.805		28.822			
18:2	g	6.174		1.753		28.005			
18:3	g	0.160		0.045		0.726			
18:4	g								
20:4	g								
20:5	g								
22:5	g								
22:6	g								
Cholesterol	mg	0		0		0			
Phytosterols	mg								
AMINO ACIDS:									
Tryptophan	g	0.166		0.047		0.753			
Threonine	g	0.344		0.098		1.560			
Isoleucine	g	0.436		0.124		1.978			
Leucine	g	0.844		0.240		3.828			
Lysine	g	0.306		0.087		1.388			
Methionine	g	0.125		0.036		0.567			
Cystine	g	0.176		0.050		0.798			
Phenylalanine	g	0.527		0.150		2.390			
Tyrosine	g	0.347		0.099		1.574			
Valine	g	0.508		0.144		2.304			
Arginine	g	1.654		0.470		7.503			
Histidine	g	0.251		0.071		1.139			
Alanine	g	0.544		0.154		2.468			
Aspartic acid	g	1.231		0.350		5.584			
Glutamic acid	g	2.715		0.771		12.315			
Glycine	g	0.540		0.153		2.449			
Proline	g	0.391		0.111		1.774			
Serine	g	0.514		0.146		2.332			

¹ Value based on data for product without added salt. Product with added salt contains 780 mg sodium per 100 g.

Filberts or Hazelnuts, oil roasted, unblanched

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g . . .	1.20	1	0.34		5.44
Food energy	{ kcal . . .	660	187			2,992
	kJ . . .	2,760	784			12,521
Protein (N X 5.30)	g . . .	14.25	1	4.05		64.62
Total lipid (fat)	g . . .	63.60	1	18.06		288.49
Carbohydrate, total	g . . .	19.15		5.44		86.88
Fiber	g . . .	2.50	1	0.71		11.34
Ash	g . . .	1.80	1	0.51		8.16
MINERALS:						
Calcium	mg . . .	196		56		889
Iron	mg . . .	3.42		0.97		15.49
Magnesium	mg . . .	298		85		1,352
Phosphorus	mg . . .	326		92		1,477
Potassium	mg . . .	465		132		2,110
Sodium	mg . . .	3		1		14
Zinc	mg . . .	2.51		0.71		11.38
Copper	mg . . .	1.576		0.448		7.149
Manganese	mg . . .	2.106		0.598		9.553
VITAMINS:						
Ascorbic acid	mg . . .					
Thiamin	mg . . .					
Riboflavin	mg . . .					
Niacin	mg . . .					
Pantothenic acid	mg . . .					
Vitamin B ₆	mg . . .					
Folacin	mcg . . .					
Vitamin B ₁₂	mcg . . .	0		0		0
Vitamin A	{ RE . . .					
	IU . . .					
LIPIDS:						
Fatty acids:						
Saturated, total	g . . .	4.675		1.328		21.206
4:0	g . . .					
6:0	g . . .					
8:0	g . . .					
10:0	g . . .					
12:0	g . . .					
14:0	g . . .	0.118		0.034		0.535
16:0	g . . .	3.165		0.899		14.356
18:0	g . . .	1.293		0.367		5.865
Monounsaturated, total	g . . .	49.841		14.155		226.079
16:1	g . . .	0.214		0.061		0.971
18:1	g . . .	49.379		14.024		223.983
20:1	g . . .	0.099		0.028		0.449
22:1	g . . .					
Polysaturated, total	g . . .	6.095		1.731		27.647
18:2	g . . .	5.922		1.682		26.862
18:3	g . . .	0.154		0.044		0.699
18:4	g . . .					
20:4	g . . .					
20:5	g . . .					
22:5	g . . .					
22:6	g . . .					
Cholesterol	mg . . .	0		0		0
Phytosterols	mg . . .					
AMINO ACIDS:						
Tryptophan	g . . .	0.237		0.067		1.075
Threonine	g . . .	0.489		0.139		2.218
Isoleucine	g . . .	0.621		0.176		2.817
Leucine	g . . .	1.202		0.341		5.452
Lysine	g . . .	0.435		0.124		1.973
Methionine	g . . .	0.177		0.050		0.803
Cystine	g . . .	0.250		0.071		1.134
Phenylalanine	g . . .	0.750		0.213		3.402
Tyrosine	g . . .	0.495		0.141		2.245
Valine	g . . .	0.723		0.205		3.280
Arginine	g . . .	2.355		0.669		10.682
Histidine	g . . .	0.358		0.102		1.624
Alanine	g . . .	0.774		0.220		3.511
Aspartic acid	g . . .	1.753		0.498		7.952
Glutamic acid	g . . .	3.865		1.098		17.532
Glycine	g . . .	0.769		0.218		3.488
Proline	g . . .	0.556		0.158		2.522
Serine	g . . .	0.731		0.208		3.316

¹ Value based on data for product without added salt. Product with added salt contains 786 mg sodium per 100 g.

Formulated, wheat-based, unflavored¹ ²

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples			
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	2.50	1	0.71		11.34
Food energy	{ kcal	622		177	2,822	
	kcal	2,603		739	11,806	
Protein (N X 5.80)	g	13.82	1	3.92	62.66	
Total lipid (fat)	g	57.70	1	16.39	261.73	
Carbohydrate, total	g	23.68		6.73	107.43	
Fiber	g	0.80	1	0.23	3.63	
Ash	g	2.30	1	0.65	10.43	
MINERALS:						
Calcium	mg	26	1	7	117	
Iron	mg	2.40	1	0.68	10.89	
Magnesium	mg					
Phosphorus	mg	371	1	105	1,683	
Potassium	mg	318	1	90	1,442	
Sodium	mg	505	1	143	2,291	
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.300	1	0.085	1.361	
Riboflavin	mg	0.300	1	0.085	1.361	
Niacin	mg	1.500	1	0.426	6.804	
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	8.701		2.471		39.468
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.094		0.027		0.426
16:0	g	5.957		1.692		27.021
18:0	g	2.687		0.763		12.188
Monounsaturated, total	g	23.545		6.687		106.800
16:1	g	0.230		0.065		1.043
18:1	g	23.263		6.607		105.521
20:1	g					
22:1	g					
Polyunsaturated, total	g	22.714		6.451		103.031
18:2	g	20.974		5.957		95.138
18:3	g	1.687		0.479		7.652
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.164		0.047		0.744
Threonine	g	0.579		0.164		2.626
Isoleucine	g	0.555		0.158		2.517
Leucine	g	0.991		0.281		4.495
Lysine	g	0.910		0.258		4.128
Methionine	g	0.279		0.079		1.266
Cystine	g	0.252		0.072		1.143
Phenylalanine	g	0.603		0.171		2.735
Tyrosine	g	0.484		0.137		2.195
Valine	g	0.729		0.207		3.307
Arginine	g	1.065		0.302		4.831
Histidine	g	0.393		0.112		1.783
Alanine	g	0.817		0.232		3.706
Aspartic acid	g	1.267		0.360		5.747
Glutamic acid	g	2.499		0.710		11.335
Glycine	g	0.772		0.219		3.502
Proline	g	0.846		0.240		3.837
Serine	g	0.696		0.198		3.157

¹ Values based on a mixture of hydrogenated soybean oil, wheat germ, fructose, wheat starch, sodium caseinate, soy protein, and salt.

² Uncolored, salted.

Formulated, wheat-based, flavored, macadamia flavored¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	3.10	1	0.88		14.06
Food energy	{ kcal	619		176		2,806
	{ kJ	2,588		735		11,740
Protein (Nx 5.80)	g	11.19	1	3.18		50.78
Total lipid (fat)	g	56.50	1	16.05		256.28
Carbohydrate, total	g	27.91		7.93		126.58
Fiber	g	0.60	1	0.17		2.72
Ash	g	1.30	1	0.37		5.90
MINERALS:						
Calcium	mg	20	1	6		88
Iron	mg	2.00	1	0.57		9.07
Magnesium	mg					
Phosphorus	mg	301	1	85		1,365
Potassium	mg	261	1	74		1,184
Sodium	mg	47	1	13		212
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.200	1	0.057		0.907
Riboflavin	mg	0.200	1	0.057		0.907
Niacin	mg	1.000	1	0.284		4.536
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	8.482		2.409		38.474
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.079		0.022		0.358
16:0	g	5.722		1.625		25.955
18:0	g	2.704		0.768		12.265
Monounsaturated, total	g	23.521		6.680		106.691
16:1	g	0.225		0.064		1.021
18:1	g	23.242		6.601		105.426
20:1	g					
22:1	g					
Polyunsaturated, total	g	21.867		6.210		99.189
18:2	g	20.230		5.745		91.763
18:3	g	1.583		0.450		7.180
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.139		0.039		0.631
Threonine	g	0.475		0.135		2.155
Isoleucine	g	0.486		0.138		2.204
Leucine	g	0.853		0.242		3.869
Lysine	g	0.766		0.218		3.475
Methionine	g	0.239		0.068		1.084
Cystine	g	0.185		0.053		0.839
Phenylalanine	g	0.511		0.145		2.318
Tyrosine	g	0.428		0.122		1.941
Valine	g	0.621		0.176		2.817
Arginine	g	0.816		0.232		3.701
Histidine	g	0.324		0.092		1.470
Alanine	g	0.623		0.177		2.826
Aspartic acid	g	1.021		0.290		4.631
Glutamic acid	g	2.115		0.601		9.594
Glycine	g	0.575		0.163		2.608
Proline	g	0.766		0.218		3.475
Serine	g	0.587		0.167		2.663

¹ Values based on a mixture of hydrogenated soybean oil, wheat germ, sugar, wheat starch, sodium caseinate, soy protein, and natural and artificial flavor.

Formulated, wheat-based, flavored, all other flavors¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples		
A	B	C	D	E	F
PROXIMATE:				1 oz = 28.4 g	G
Water	g	2.00	1	0.57	9.07
Food energy	{ kcal	647	184	2,935	
	{ kJ	2,707	769	12,281	
Protein (N X 5.80)	g	13.11	1	3.72	59.48
Total lipid (fat)	g	62.30	1	17.69	282.59
Carbohydrate, total	g	20.79		5.90	94.29
Fiber	g	1.00	1	0.28	4.54
Ash	g	1.80	1	0.51	8.16
MINERALS:					
Calcium	mg	22	1	6	99
Iron	mg	2.60	1	0.74	11.79
Magnesium	mg				
Phosphorus	mg	366	1	104	1,660
Potassium	mg	320	1	91	1,452
Sodium	mg	91	1	26	413
Zinc	mg				
Copper	mg				
Manganese	mg				
VITAMINS:					
Ascorbic acid	mg				
Thiamin	mg	0.400	1	0.114	1.814
Riboflavin	mg	0.300	1	0.085	1.361
Niacin	mg	1.500	1	0.426	6.804
Pantothenic acid	mg				
Vitamin B ₆	mg				
Folacin	mcg				
Vitamin B ₁₂	mcg	0		0	0
Vitamin A	{ RE				
	{ IU				
LIPIDS:					
Fatty acids:					
Saturated, total	g	9.370		2.661	42.502
4:0	g				
6:0	g				
8:0	g				
10:0	g				
12:0	g				
14:0	g	0.093		0.026	0.422
16:0	g	6.360		1.806	28.849
18:0	g	2.948		0.837	13.372
Monounsaturated, total	g	25.722		7.305	116.675
16:1	g	0.248		0.070	1.125
18:1	g	25.416		7.218	115.287
20:1	g				
22:1	g				
Polyunsaturated, total	g	24.284		6.897	110.152
18:2	g	22.448		6.375	101.824
18:3	g	1.777		0.505	8.060
18:4	g				
20:4	g				
20:5	g				
22:5	g				
22:6	g				
Cholesterol	mg	0		0	0
Phytosterols	mg				
AMINO ACIDS:					
Tryptophan	g	0.172		0.049	0.780
Threonine	g	0.552		0.157	2.504
Isoleucine	g	0.552		0.157	2.504
Leucine	g	0.972		0.276	4.409
Lysine	g	0.886		0.252	4.019
Methionine	g	0.274		0.078	1.243
Cystine	g	0.226		0.064	1.025
Phenylalanine	g	0.586		0.166	2.658
Tyrosine	g	0.486		0.138	2.204
Valine	g	0.712		0.202	3.230
Arginine	g	0.981		0.279	4.450
Histidine	g	0.380		0.108	1.724
Alanine	g	0.753		0.214	3.416
Aspartic acid	g	1.194		0.339	5.416
Glutamic acid	g	2.433		0.691	11.036
Glycine	g	0.699		0.199	3.171
Proline	g	0.857		0.243	3.887
Serine	g	0.674		0.191	3.057

¹ Values based on a mixture of hydrogenated soybean oil, wheat germ, sugar, sodium caseinate, soy protein, natural and artificial flavors, and artificial color.

NUTS

Ginkgo Nuts, raw
Ginkgo biloba

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 24%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				E	F		
A	B	C	D	1 oz = 28.4 g	F	G	
PROXIMATE:							
Water	g	55.20	1	16.68		190.27	
Food energy	{ kcal	182		52		628	
	{ kJ	762		216		2,626	
Protein (N X 5.30)	g	4.32	1	1.23		14.90	
Total lipid (fat)	g	1.68	0.025	0.48		5.77	
Carbohydrate, total	g	37.60	2	10.68		129.61	
Fiber	g	0.50	1	0.14		1.72	
Ash	g	1.20	1	0.34		4.14	
MINERALS:							
Calcium	mg	2	1	1		7	
Iron	mg	1.00	1	0.28		3.45	
Magnesium	mg	27		8		93	
Phosphorus	mg	124	1	35		427	
Potassium	mg	510		145		1,760	
Sodium	mg	7		2		24	
Zinc	mg	0.34		0.10		1.18	
Copper	mg	0.274		0.078		0.944	
Manganese	mg	0.113		0.032		0.390	
VITAMINS:							
Ascorbic acid	mg	15.0	1	4.3		51.7	
Thiamin	mg	0.220	1	0.062		0.758	
Riboflavin	mg	0.090	1	0.026		0.310	
Niacin	mg	6.000	1	1.704		20.682	
Pantothenic acid.	mg	0.160	1	0.045		0.552	
Vitamin B ₆	mg						
Folacin	mcg					0	
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE	56	1	16		192	
	{ IU	558	1	158		1,923	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.319		0.091		1.100	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.006	1	0.002		0.021	
16:0	g	0.288	2	0.082		0.993	
18:0	g	0.016	2	0.005		0.055	
Monounsaturated, total	g	0.619		0.176		2.134	
16:1	g	0.079	2	0.022		0.272	
18:1	g	0.512	2	0.145		1.765	
20:1	g	0.010	1	0.003		0.034	
22:1	g						
Polysaturated, total	g	0.618		0.176		2.130	
18:2	g	0.578	2	0.164		1.992	
18:3	g	0.021	2	0.006		0.072	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.071	2	0.020		0.245	
Threonine	g	0.268	2	0.076		0.924	
Isoleucine	g	0.209	2	0.059		0.720	
Leucine	g	0.316	2	0.090		1.089	
Lysine	g	0.206	2	0.059		0.710	
Methionine	g	0.055	2	0.016		0.190	
Cystine	g	0.023	2	0.007		0.079	
Phenylalanine	g	0.171	2	0.049		0.589	
Tyrosine	g	0.061	2	0.017		0.210	
Valine	g	0.283	2	0.080		0.976	
Arginine	g	0.420	2	0.119		1.448	
Histidine	g	0.102	2	0.029		0.352	
Alanine	g	0.247	2	0.070		0.851	
Aspartic acid	g	0.543	2	0.154		1.872	
Glutamic acid	g	0.836	2	0.237		2.882	
Glycine	g	0.232	2	0.066		0.800	
Proline	g	0.347	2	0.099		1.196	
Serine	g	0.290	2	0.082		1.000	

Ginkgo Nuts, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 24%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	12.40		3.52		42.74	
Food energy	{ kcal	348		99		1,198	
	{ kJ	1,454		413		5,012	
Protein (N X 5.30)	g	10.35		2.94		35.66	
Total lipid (fat)	g	2.00	1	0.57		6.89	
Carbohydrate, total	g	72.45		20.58		249.75	
Fiber	g	0.98		0.28		3.37	
Ash	g	2.80		0.80		9.65	
MINERALS:							
Calcium	mg	20		6		69	
Iron	mg	1.60		0.45		5.52	
Magnesium	mg	53		15		182	
Phosphorus	mg	269		76		927	
Potassium	mg	998		283		3,441	
Sodium	mg	13		4		46	
Zinc	mg	0.67	0.055	3	0.19	2.31	
Copper	mg	0.536	0.073	3	0.152	1.848	
Manganese	mg	0.220	0.020	3	0.062	0.758	
VITAMINS:							
Ascorbic acid	mg	29.3		8.3		101.1	
Thiamin	mg	0.430		0.122		1.482	
Riboflavin	mg	0.176		0.050		0.607	
Niacin	mg	11.732		3.332		40.440	
Pantothenic acid	mg	1.345	1	0.382		4.636	
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE	109		31		376	
	{ IU	1,091		310		3,761	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.381		0.108		1.313	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.008		0.002		0.028	
16:0	g	0.343		0.097		1.182	
18:0	g	0.019		0.005		0.065	
Monounsaturated, total	g	0.739		0.210		2.547	
16:1	g	0.095		0.027		0.327	
18:1	g	0.611		0.174		2.106	
20:1	g	0.011		0.003		0.038	
22:1	g						
Polyunsaturated, total	g	0.737		0.209		2.540	
18:2	g	0.690		0.196		2.378	
18:3	g	0.025		0.007		0.086	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.170		0.048		0.586	
Threonine	g	0.640		0.182		2.206	
Isoleucine	g	0.500		0.142		1.724	
Leucine	g	0.755		0.214		2.602	
Lysine	g	0.494		0.140		1.703	
Methionine	g	0.133		0.038		0.458	
Cystine	g	0.055		0.016		0.190	
Phenylalanine	g	0.408		0.116		1.406	
Tyrosine	g	0.146		0.041		0.503	
Valine	g	0.677		0.192		2.334	
Arginine	g	1.005		0.285		3.464	
Histidine	g	0.244		0.069		0.841	
Alanine	g	0.591		0.168		2.037	
Aspartic acid	g	1.298		0.369		4.474	
Glutamic acid	g	2.001		0.568		6.897	
Glycine	g	0.554		0.157		1.910	
Proline	g	0.830		0.236		2.861	
Serine	g	0.695		0.197		2.396	

Ginkgo Nuts, canned

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g ¹	1 c = 155 g	Refuse:Liquid 41%	
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	72.95	1	20.72	113.07	195.21	
Food energy	{ kcal	111	32	173	298		
Protein (N X 5.30)	g	4.66	132	723	1,248		
Total lipid (fat)	g	2.29	1	0.65	3.56	6.14	
Carbohydrate, total	g	1.62	1	0.46	2.51	4.34	
Fiber	g	22.10		6.27	34.25	59.13	
Ash	g	1.62	1	0.46	2.51	4.34	
		1.04	1	0.30	1.61	2.78	
MINERALS:							
Calcium	mg	4	1	1	6	10	
Iron	mg	0.29	1	0.08	0.45	0.78	
Magnesium	mg	16	1	5	25	44	
Phosphorus	mg	54	1	15	83	143	
Potassium	mg	180	1	51	278	480	
Sodium	mg	307	1	87	476	821	
Zinc	mg	0.21		0.06	0.32	0.55	
Copper	mg	0.166		0.047	0.257	0.444	
Manganese	mg	0.068		0.019	0.105	0.182	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.309		0.088	0.479	0.827	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.006		0.002	0.009	0.016	
16:0	g	0.278		0.079	0.431	0.744	
18:0	g	0.015		0.004	0.023	0.040	
Monounsaturated, total	g	0.599		0.170	0.928	1.603	
16:1	g	0.077		0.022	0.119	0.206	
18:1	g	0.495		0.141	0.767	1.325	
20:1	g	0.009		0.003	0.014	0.024	
22:1	g						
Polysaturated, total	g	0.597		0.170	0.925	1.598	
18:2	g	0.559		0.159	0.866	1.496	
18:3	g	0.021		0.006	0.033	0.056	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.038		0.011	0.059	0.102	
Threonine	g	0.142		0.040	0.220	0.380	
Isoleucine	g	0.111		0.032	0.172	0.297	
Leucine	g	0.168		0.048	0.260	0.450	
Lysine	g	0.110		0.031	0.171	0.294	
Methionine	g	0.029		0.008	0.045	0.078	
Cystine	g	0.012		0.003	0.019	0.032	
Phenylalanine	g	0.090		0.026	0.140	0.241	
Tyrosine	g	0.032		0.009	0.050	0.086	
Valine	g	0.150		0.043	0.233	0.401	
Arginine	g	0.223		0.063	0.346	0.597	
Histidine	g	0.054		0.015	0.084	0.145	
Alanine	g	0.131		0.037	0.203	0.351	
Aspartic acid	g	0.288		0.082	0.446	0.771	
Glutamic acid	g	0.444		0.126	0.688	1.188	
Glycine	g	0.123		0.035	0.191	0.329	
Proline	g	0.184		0.052	0.285	0.492	
Serine	g	0.154		0.044	0.239	0.412	

¹ 1 oz = approx. 22 small (5/8 x 9/16 x 5/8 in), 14 medium (11/16 x 9/16 x 1/2 in), or 9 large (12/16 x 11/16 x 9/16 in) size kernels.

Hickorynuts, dried
Carya spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 68%
	Mean A	Standard error B	Number of samples C	Approximate measure and weight 1 oz = 28.4 g ¹ E	F	
PROXIMATE:						
Water	g	2.65	0.136	4	0.75	3.85
Food energy	{ kcal kJ	657 2,750		187 781		954 3,990
Protein (N X 5.30)	g	12.72	0.869	8	3.61	18.46
Total lipid (fat)	g	64.37	1.540	18	18.28	93.41
Carbohydrate, total	g	18.25			5.18	26.48
Fiber	g	3.24	0.217	6	0.92	4.70
Ash	g	2.00	0.134	6	0.57	2.91
MINERALS:						
Calcium	mg	61	4.371	8	17	88
Iron	mg	2.12	0.036	8	0.60	3.08
Magnesium	mg	173	7.756	8	49	251
Phosphorus	mg	336	18.968	8	95	488
Potassium	mg	436	26.350	8	124	633
Sodium	mg	1	0.046	8	0	1
Zinc	mg	4.31	0.111	8	1.22	6.26
Copper	mg	0.738	0.017	8	0.210	1.071
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE. IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	7.038		1.999		10.212
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	5.417		1	1.538	7.860
18:0	g	1.416		1	0.402	2.055
Monounsaturated, total	g	32.611			9.262	47.319
16:1	g	0.277		2	0.079	0.402
18:1	g	32.011		2	9.091	46.448
20:1	g					
22:1	g					
Polyunsaturated, total	g	21.886			6.216	31.757
18:2	g	20.623		2	5.857	29.924
18:3	g	1.047		2	0.297	1.519
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.139		8	0.039	0.202
Threonine	g	0.422		4	0.120	0.612
Isoleucine	g	0.576		4	0.164	0.836
Leucine	g	1.027		4	0.292	1.490
Lysine	g	0.497		4	0.141	0.721
Methionine	g	0.300		12	0.085	0.435
Cystine	g	0.271		12	0.077	0.393
Phenylalanine	g	0.713		4	0.202	1.035
Tyrosine	g	0.454		4	0.129	0.659
Valine	g	0.730		4	0.207	1.059
Arginine	g	2.086		4	0.592	3.027
Histidine	g	0.389		4	0.110	0.564
Alanine	g	0.662		4	0.188	0.961
Aspartic acid	g	1.368		4	0.389	1.985
Glutamic acid	g	2.885		4	0.819	4.186
Glycine	g	0.708		4	0.201	1.027
Proline	g	0.571		4	0.162	0.829
Serine	g	0.806		4	0.229	1.170

¹ With refuse: 1 oz *Carya* spp. = approx. 2-3 nuts; 1 oz shagbark hickory (*C. ovata*) = approx. 7 nuts; 1 oz shellbark hickory (*C. laciniosa*) = approx. 2 nuts.

Macadamia Nuts, dried

Macadamia integrifolia, M. tetraphylla

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 69%	
	Mean A	Standard error B	Number of samples C	Approximate measure and weight			
				1 oz = 28.4 g E	1 c = 134 g F		
PROXIMATE:							
Water	g	2.88	0.701	5	0.82	3.86	4.05
Food energy	{ kcal	702		199	940	987	
	kJ	2,936		834	3,934	4,128	
Protein (N X 5.30)	g	8.30	0.655	2	2.36	11.12	11.67
Total lipid (fat)	g	73.72	1.633	3	20.94	98.79	103.65
Carbohydrate, total	g	13.73			3.90	18.40	19.31
Fiber	g	5.28	1.250	2	1.50	7.08	7.42
Ash	g	1.36	0.120	2	0.39	1.82	1.91
MINERALS:							
Calcium	mg	70	34.500	2	20	94	98
Iron	mg	2.41	0.600	2	0.68	3.23	3.39
Magnesium	mg	116		1	33	155	163
Phosphorus	mg	136	34.400	2	39	183	192
Potassium	mg	368		1	104	493	517
Sodium	mg	5		1	1	6	6
Zinc	mg	1.71		1	0.49	2.29	2.40
Copper	mg	0.296			0.084	0.397	0.416
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.350		1	0.099	0.469	0.492
Riboflavin	mg	0.110		1	0.031	0.147	0.155
Niacin	mg	2.140		1	0.608	2.868	3.009
Pantothenic acid	mg						
Vitamin B6	mg						
Folacin	mcg						
Vitamin B12	mcg	0			0	0	0
Vitamin A	{ RE	0		1	0	0	0
	IU	0		1	0	0	0
LIPIDS:							
Fatty acids:							
Saturated, total	g	11.037			3.135	14.790	15.518
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.468		44	0.133	0.627	0.658
16:0	g	6.247		44	1.774	8.371	8.783
18:0	g	2.704		44	0.768	3.623	3.802
Monounsaturated, total	g	58.171			16.521	77.949	81.788
16:1	g	15.961		44	4.533	21.388	22.441
18:1	g	41.163		44	11.690	55.158	57.875
20:1	g	1.047		44	0.297	1.403	1.472
22:1	g						
Polyunsaturated, total	g	1.271			0.361	1.703	1.787
18:2	g	1.271		44	0.361	1.703	1.787
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g						
Threonine	g	0.263		2	0.075	0.352	0.370
Isoleucine	g	0.244		2	0.069	0.327	0.343
Leucine	g	0.462		2	0.131	0.619	0.650
Lysine	g	0.324		2	0.092	0.434	0.456
Methionine	g	0.092		2	0.026	0.123	0.129
Cystine	g	0.096		2	0.027	0.129	0.135
Phenylalanine	g	0.260		2	0.074	0.348	0.366
Tyrosine	g	0.337		2	0.096	0.452	0.474
Valine	g	0.321		2	0.091	0.430	0.451
Arginine	g	0.899		2	0.255	1.205	1.264
Histidine	g	0.168		2	0.048	0.225	0.236
Alanine	g	0.329		2	0.093	0.441	0.463
Aspartic acid	g	0.827		2	0.235	1.108	1.163
Glutamic acid	g	1.782		2	0.506	2.388	2.505
Glycine	g	0.371		2	0.105	0.497	0.522
Proline	g	0.396		2	0.112	0.531	0.557
Serine	g	0.351		2	0.100	0.470	0.494

Macadamia Nuts, oil roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	G
				1 oz = 28.4 g ¹	1 c wholes or halves = 134 g ²		
A	B	C	D	E	F		
PROXIMATE:							
Water	g	1.67	0.265	6	0.47	2.23	7.55
Food energy	{ kcal	718		204	962		3,258
	kJ	3,005		853	4,027		13,630
Protein (N X 5.30)	g	7.26	0.562	2	2.06	9.73	32.94
Total lipid (fat)	g	76.52	1.241	3	21.73	102.54	347.09
Carbohydrate, total	g	12.90			3.66	17.29	58.53
Fiber	g	1.73	0.110	2	0.49	2.32	7.85
Ash	g	1.65	0.250	2	0.47	2.21	7.48
MINERALS:							
Calcium	mg	45	5.041	3	13	60	205
Iron	mg	1.80	0.113	3	0.51	2.41	8.15
Magnesium	mg	117	2.050	2	33	157	531
Phosphorus	mg	200	20.922	3	57	268	908
Potassium	mg	329	43.400	2	94	441	1,494
Sodium ³	mg	7			2	9	30
Zinc	mg	1.10		1	0.31	1.47	4.99
Copper	mg	0.300		1	0.085	0.402	1.361
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0		1	0.0	0.0	0.0
Thiamin	mg	0.213	0.003	2	0.060	0.285	0.966
Riboflavin	mg	0.109	0.009	2	0.031	0.146	0.494
Niacin	mg	2.020	0.420	2	0.574	2.707	9.163
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	1	0.900	2	0	1	4
	IU	9	9.000	2	3	12	41
LIPIDS:							
Fatty acids:							
Saturated, total	g	11.456			3.254	15.351	51.964
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.486			0.138	0.651	2.204
16:0	g	6.484			1.841	8.689	29.411
18:0	g	2.807			0.797	3.761	12.733
Monounsaturated, total	g	60.378			17.147	80.907	273.875
16:1	g	16.567			4.705	22.200	75.148
18:1	g	42.725			12.134	57.252	193.801
20:1	g	1.087			0.309	1.457	4.931
22:1	g						
Polyunsaturated, total	g	1.319			0.375	1.767	5.983
18:2	g	1.319			0.375	1.767	5.983
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g						
Threonine	g	0.230			0.065	0.308	1.043
Isoleucine	g	0.214			0.061	0.287	0.971
Leucine	g	0.404			0.115	0.541	1.833
Lysine	g	0.284			0.081	0.381	1.288
Methionine	g	0.081			0.023	0.109	0.367
Cystine	g	0.084			0.024	0.113	0.381
Phenylalanine	g	0.227			0.064	0.304	1.030
Tyrosine	g	0.295			0.084	0.395	1.338
Valine	g	0.281			0.080	0.377	1.275
Arginine	g	0.786			0.223	1.053	3.565
Histidine	g	0.147			0.042	0.197	0.667
Alanine	g	0.288			0.082	0.386	1.306
Aspartic acid	g	0.723			0.205	0.969	3.280
Glutamic acid	g	1.559			0.443	2.089	7.072
Glycine	g	0.325			0.092	0.436	1.474
Proline	g	0.347			0.099	0.465	1.574
Serine	g	0.307			0.087	0.411	1.393

¹ 1 oz = approx. 10-12 whole kernels or 20-24 halves.² 1 cup = approx. 33 whole kernels or 73 halves; 1 cup chopped = 110 g.³ Value based on data for product without added salt. Product with added salt contains 260 mg sodium per 100 g.

NUTS

Mixed Nuts, dry roasted, with peanuts¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 137 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.75		0.50	2.40	7.94	
Food energy	{ kcal	594		169	814	2,694	
	{ kJ	2,485		706	3,404	11,270	
Protein (N X 5.30)	g	17.30		4.91	23.70	78.47	
Total lipid (fat)	g	51.45		14.61	70.49	233.38	
Carbohydrate, total	g	26.35		7.20	34.73	114.99	
Fiber	g	0.90		0.26	1.23	4.08	
Ash	g	4.15		1.18	5.69	18.82	
MINERALS:							
Calcium	mg	70		20	96	318	
Iron	mg	3.70		1.05	5.07	16.78	
Magnesium	mg	225		64	308	1,021	
Phosphorus	mg	435		124	596	1,973	
Potassium	mg	597		169	817	2,706	
Sodium ²	mg	12		3	16	55	
Zinc	mg	3.80		1.08	5.21	17.24	
Copper	mg	1.279		0.363	1.752	5.802	
Manganese	mg	1.937		0.550	2.654	8.786	
VITAMINS:							
Ascorbic acid	mg	0.4		0.1	0.6	1.9	
Thiamin	mg	0.200		0.057	0.274	0.907	
Riboflavin	mg	0.200		0.057	0.274	0.907	
Niacin	mg	4.700		1.335	6.439	21.319	
Pantothenic acid	mg	1.205		0.342	1.651	5.466	
Vitamin B ₆	mg	0.296		0.084	0.406	1.343	
Folacin	mcg	50.4		14.3	69.0	228.4	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	1		0	2	7	
	{ IU	15		4	21	68	
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.899		1.959	9.452	31.294	
4:0	g						
6:0	g						
8:0	g	0.045		0.013	0.062	0.204	
10:0	g	0.045		0.013	0.062	0.204	
12:0	g	0.271		0.077	0.371	1.229	
14:0	g	0.216		0.061	0.296	0.980	
16:0	g	4.213		1.196	5.772	19.110	
18:0	g	1.749		0.497	2.396	7.933	
Monounsaturated, total	g	31.395		8.916	43.011	142.408	
16:1	g	0.223		0.063	0.306	1.012	
18:1	g	30.802		8.748	42.199	139.718	
20:1	g	0.259		0.074	0.355	1.175	
22:1	g						
Polysaturated, total	g	10.768		3.058	14.752	48.844	
18:2	g	10.535		2.992	14.433	47.787	
18:3	g	0.190		0.054	0.260	0.862	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.264		0.075	0.362	1.198	
Threonine	g	0.597		0.170	0.818	2.708	
Isoleucine	g	0.744		0.211	1.019	3.375	
Leucine	g	1.371		0.389	1.878	6.219	
Lysine	g	0.712		0.202	0.975	3.230	
Methionine	g	0.228		0.065	0.312	1.034	
Cystine	g	0.287		0.082	0.393	1.302	
Phenylalanine	g	0.953		0.271	1.306	4.323	
Tyrosine	g	0.676		0.192	0.926	3.066	
Valine	g	0.934		0.265	1.280	4.237	
Arginine	g	2.242		0.637	3.072	10.170	
Histidine	g	0.480		0.136	0.658	2.177	
Alanine	g	0.806		0.229	1.104	3.656	
Aspartic acid	g	2.056		0.584	2.817	9.326	
Glutamic acid	g	4.423		1.266	6.060	20.063	
Glycine	g	1.064		0.302	1.458	4.826	
Proline	g	0.875		0.249	1.199	3.969	
Serine	g	0.917		0.260	1.256	4.160	

¹ Values based on a mixture of cashew nuts, almonds, peanuts, filberts, and pecans.² Value based on data for product without added salt. Product with added salt contains 669 mg sodium per 100 g.

Mixed Nuts, oil roasted, with peanuts¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g	1 c = 142 g	F	G
A	B	C	D	E	F		
PROXIMATE:							
Water	g	2.03		0.58	2.89	9.22	
Food energy	{ kcal	617	175	876	2,798		
	kJ	2,581	733	3,665	11,706		
Protein (N X 5.30)	g	16.76		4.76	23.80	76.03	
Total lipid (fat)	g	56.33		16.00	79.99	255.53	
Carbohydrate, total	g	21.41		6.08	30.40	97.09	
Fiber	g	2.16		0.61	3.06	9.78	
Ash	g	3.47		0.98	4.92	15.73	
MINERALS:							
Calcium	mg	108		31	153	488	
Iron	mg	3.21		0.91	4.56	14.57	
Magnesium	mg	235		67	333	1,064	
Phosphorus	mg	464		132	659	2,106	
Potassium	mg	581		165	825	2,636	
Sodium ²	mg	11		3	16	50	
Zinc	mg	5.08		1.44	7.22	23.05	
Copper	mg	1.661		0.472	2.359	7.534	
Manganese	mg	1.892		0.537	2.687	8.582	
VITAMINS:							
Ascorbic acid	mg	0.5		0.1	0.7	2.1	
Thiamin	mg	0.498		0.141	0.707	2.259	
Riboflavin	mg	0.222		0.063	0.315	1.007	
Niacin	mg	5.061		1.437	7.187	22.957	
Pantothenic acid	mg	1.248		0.354	1.772	5.661	
Vitamin B ₆	mg	0.240		0.068	0.341	1.089	
Folacin	mcg	83.0		23.6	117.9	376.5	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	2		1	3	9	
	IU	19		6	28	88	
LIPIDS:							
Fatty acids:							
Saturated, total	g	8.725		2.478	12.390	39.577	
4:0	g						
6:0	g						
8:0	g	0.050		0.014	0.071	0.227	
10:0	g	0.050		0.014	0.071	0.227	
12:0	g	0.296		0.084	0.420	1.343	
14:0	g	0.255		0.072	0.362	1.157	
16:0	g	5.238		1.488	7.438	23.760	
18:0	g	2.423		0.688	3.441	10.991	
Monounsaturated, total	g	31.695		9.001	45.007	143.769	
16:1	g	0.238		0.068	0.338	1.080	
18:1	g	31.048		8.818	44.088	140.834	
20:1	g	0.299		0.085	0.425	1.356	
22:1	g						
Polyunsaturated, total	g	13.299		3.777	18.885	60.324	
18:2	g	13.067		3.711	18.555	59.272	
18:3	g	0.176		0.050	0.250	0.798	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.247		0.070	0.351	1.120	
Threonine	g	0.569		0.162	0.808	2.581	
Isoleucine	g	0.724		0.206	1.028	3.284	
Leucine	g	1.344		0.382	1.908	6.096	
Lysine	g	0.658		0.187	0.934	2.985	
Methionine	g	0.338		0.096	0.480	1.533	
Cystine	g	0.294		0.083	0.417	1.334	
Phenylalanine	g	0.920		0.261	1.306	4.173	
Tyrosine	g	0.655		0.186	0.930	2.971	
Valine	g	0.936		0.266	1.329	4.246	
Arginine	g	2.024		0.575	2.874	9.181	
Histidine	g	0.471		0.134	0.669	2.136	
Alanine	g	0.772		0.219	1.096	3.502	
Aspartic acid	g	1.958		0.556	2.780	8.881	
Glutamic acid	g	4.128		1.172	5.862	18.725	
Glycine	g	1.006		0.286	1.429	4.563	
Proline	g	0.822		0.233	1.167	3.729	
Serine	g	0.911		0.259	1.294	4.132	

¹ Values based on a mixture of cashew nuts, peanuts, brazilnuts, filberts, almonds, and pecans.² Value based on data for product without added salt. Product with added salt contains 652 mg sodium per 100 g.

Mixed Nuts, oil roasted, without peanuts¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g	1 c = 144 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.15		0.89	4.53	14.27	
Food energy	{ kcal	615	175	886	2,790		
	kj	2,598	738	3,741	11,783		
Protein (N X 5.30)	g	15.52	4.41	22.35	70.42		
Total lipid (fat)	g	56.17	15.95	80.88	254.79		
Carbohydrate, total	g	22.27	6.33	32.08	101.04		
Fiber	g	2.21	0.63	3.18	10.02		
Ash	g	2.89	0.82	4.16	13.09		
MINERALS:							
Calcium	mg	106	30	153	482		
Iron	mg	2.57	0.73	3.70	11.66		
Magnesium	mg	251	71	361	1,137		
Phosphorus	mg	449	127	646	2,035		
Potassium	mg	544	154	783	2,467		
Sodium ²	mg	11	3	16	50		
Zinc	mg	4.66	1.32	6.71	21.12		
Copper	mg	1.795	0.510	2.585	8.142		
Manganese	mg	1.547	0.439	2.228	7.017		
VITAMINS:							
Ascorbic acid	mg	0.5	0.2	0.8	2.4		
Thiamin	mg	0.504	0.143	0.726	2.286		
Riboflavin	mg	0.486	0.138	0.700	2.204		
Niacin	mg	1.964	0.558	2.828	8.909		
Pantothenic acid	mg	0.962	0.273	1.385	4.364		
Vitamin B ₆	mg	0.180	0.051	0.259	0.816		
Folacin	mcg	56.4	16.0	81.2	255.9		
Vitamin B ₁₂	mcg	0	0	0	0		
Vitamin A	{ RE	2	1	3	9		
	IU	20	6	29	93		
LIPIDS:							
Fatty acids:							
Saturated, total	g	9.087	2.581	13.085	41.219		
4:0	g						
6:0	g						
8:0	g	0.078	0.022	0.112	0.354		
10:0	g	0.078	0.022	0.112	0.354		
12:0	g	0.467	0.133	0.672	2.118		
14:0	g	0.342	0.097	0.492	1.551		
16:0	g	4.932	1.401	7.102	22.372		
18:0	g	2.783	0.790	4.008	12.624		
Monounsaturated, total	g	33.137	9.411	47.717	150.309		
16:1	g	0.329	0.093	0.474	1.492		
18:1	g	32.517	9.235	46.824	147.497		
20:1	g	0.149	0.042	0.215	0.676		
22:1	g						
Polyunsaturated, total	g	11.449	3.252	16.487	51.933		
18:2	g	11.137	3.163	16.037	50.517		
18:3	g	0.249	0.071	0.359	1.129		
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0	0	0	0		
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.252	0.072	0.363	1.143		
Threonine	g	0.568	0.161	0.818	2.576		
Isoleucine	g	0.703	0.200	1.012	3.189		
Leucine	g	1.265	0.359	1.822	5.738		
Lysine	g	0.682	0.194	0.982	3.094		
Methionine	g	0.346	0.098	0.498	1.569		
Cystine	g	0.302	0.086	0.435	1.370		
Phenylalanine	g	0.820	0.233	1.181	3.720		
Tyrosine	g	0.510	0.145	0.734	2.313		
Valine	g	0.952	0.270	1.371	4.318		
Arginine	g	1.989	0.565	2.864	9.022		
Histidine	g	0.416	0.118	0.599	1.887		
Alanine	g	0.715	0.203	1.030	3.243		
Aspartic acid	g	1.617	0.459	2.328	7.335		
Glutamic acid	g	3.872	1.100	5.576	17.563		
Glycine	g	0.844	0.240	1.215	3.828		
Proline	g	0.773	0.220	1.113	3.506		
Serine	g	1.620	0.460	2.333	7.348		

¹ Value based on a mixture of cashew nuts, almonds, brazilnus, pecans, and filberts.² Value based on data for product without added salt. Product with added salt contains 700 mg sodium per 100 g.

Peanut Kernels, dried¹*Arachis hypogaea*

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: Shells 27%	
				1 oz = 28.4 g	1 c = 146 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	6.65		1.89	9.71	22.02	
Food energy	{ kcal	567		161	827	1,876	
	kJ	2,370		673	3,461	7,849	
Protein (N X 5.46)	g	25.67		7.29	37.48	85.00	
Total lipid (fat)	g	49.18		13.97	71.80	162.82	
Carbohydrate, total	g	16.18		4.60	23.63	53.59	
Fiber	g	4.89		1.39	7.14	16.19	
Ash	g	2.32		0.66	3.38	7.67	
MINERALS:							
Calcium	mg	58		17	85	193	
Iron	mg	3.23		0.92	4.71	10.69	
Magnesium	mg	180		51	262	594	
Phosphorus	mg	383		109	560	1,269	
Potassium	mg	717		204	1,047	2,374	
Sodium	mg	16		5	23	53	
Zinc	mg	3.27		0.93	4.78	10.84	
Copper	mg	1.002		0.285	1.463	3.318	
Manganese	mg	1.113		0.316	1.625	3.685	
VITAMINS: ²							
Ascorbic acid	mg	0.0		0.0	0.0	0.0	
Thiamin	mg	0.664		0.189	0.969	2.199	
Riboflavin	mg	0.131		0.037	0.191	0.434	
Niacin	mg	14.150		4.019	20.659	46.851	
Pantothenic acid	mg	2.764		0.785	4.035	9.152	
Vitamin B ₆	mg	0.296		0.084	0.432	0.980	
Folacin	mcg	100.6		28.6	146.9	333.1	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	0		0	0	0	
	IU	0		0	0	0	
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.823		1.938	9.962	22.591	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.025		0.007	0.037	0.083	
16:0	g	5.145		1.461	7.512	17.035	
18:0	g	1.098		0.312	1.603	3.635	
Monounsaturated, total	g	24.389		6.926	35.608	80.752	
16:1	g	0.009		0.003	0.013	0.030	
18:1	g	23.717		6.736	34.627	78.527	
20:1	g	0.660		0.187	0.964	2.185	
Polysaturated, total	g	15.534		4.412	22.680	51.433	
18:2	g	15.530		4.411	22.674	51.420	
18:3	g	0.003		0.001	0.004	0.010	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.310	53	0.088	0.453	1.026	
Threonine	g	0.743	77	0.211	1.085	2.460	
Isoleucine	g	0.997	73	0.283	1.456	3.301	
Leucine	g	1.928	74	0.548	2.815	6.384	
Lysine	g	0.992	88	0.282	1.448	3.285	
Methionine	g	0.263	77	0.075	0.384	0.871	
Cystine	g	0.329	29	0.093	0.480	1.089	
Phenylalanine	g	1.467	74	0.417	2.142	4.857	
Tyrosine	g	1.232	69	0.350	1.799	4.079	
Valine	g	1.161	74	0.330	1.695	3.844	
Arginine	g	3.456	73	0.982	5.046	11.443	
Histidine	g	0.748	73	0.212	1.092	2.477	
Alanine	g	1.133	66	0.322	1.654	3.751	
Aspartic acid	g	3.451	66	0.980	5.038	11.426	
Glutamic acid	g	6.094	65	1.731	8.897	20.177	
Glycine	g	1.773	66	0.504	2.589	5.870	
Proline	g	1.246	62	0.354	1.819	4.126	
Serine	g	1.434	66	0.407	2.094	4.748	

¹ Values based on a mixture of Spanish peanuts and Virginia peanuts.² Alpha-tocopherol = 9.13 mg per 100 g.

Peanut Kernels, oil roasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Shells 33%
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
	A	B	C	E	F	G
PROXIMATE:						
Water	g	1.99		0.56	2.88	6.04
Food energy	{ kcal	580		165	841	1,762
	kJ	2,426		689	3,517	7,372
Protein (N X 5.46)	g	26.78		7.60	38.82	81.37
Total lipid (fat)	g	49.19		13.97	71.32	149.48
Carbohydrate, total	g	18.48		5.25	26.79	56.15
Fiber	g	2.39		0.68	3.47	7.26
Ash	g	3.58		1.02	5.19	10.87
MINERALS:						
Calcium	mg	86		24	125	262
Iron	mg	1.92		0.54	2.78	5.83
Magnesium	mg	188		53	273	571
Phosphorus	mg	506		144	733	1,537
Potassium	mg	703		200	1,020	2,137
Sodium ³	mg	15		4	22	47
Zinc	mg	6.62		1.88	9.60	20.12
Copper	mg	1.273		0.362	1.846	3.869
Manganese	mg	1.235		0.351	1.791	3.753
VITAMINS: ⁴						
Ascorbic acid	mg	0.0		0.0	0.0	0.0
Thiamin	mg	0.293		0.083	0.425	0.890
Riboflavin	mg	0.101		0.029	0.146	0.307
Niacin	mg	14.796		4.202	21.454	44.965
Pantothenic acid	mg	2.092		0.594	3.033	6.358
Vitamin B ₆	mg	0.398		0.113	0.577	1.210
Folacin	mcg	105.6		30.0	153.1	320.8
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE	0		0	0	0
	IU	0		0	0	0
LIPIDS:						
Fatty acids:						
Saturated, total	g	6.851		1.946	9.934	20.820
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.025		0.007	0.036	0.076
16:0	g	5.166		1.467	7.491	15.699
18:0	g	1.103		0.313	1.599	3.352
Monounsaturated, total	g	24.488		6.955	35.508	74.419
16:1	g	0.009		0.003	0.013	0.027
18:1	g	23.814		6.763	34.530	72.371
20:1	g	0.663		0.188	0.961	2.015
22:1	g					
Polyunsaturated, total	g	15.597		4.430	22.616	47.399
18:2	g	15.593		4.428	22.610	47.387
18:3	g	0.003		0.001	0.004	0.009
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.324		0.092	0.470	0.985
Threonine	g	0.775		0.220	1.124	2.355
Isoleucine	g	1.039		0.295	1.507	3.158
Leucine	g	2.010		0.571	2.915	6.108
Lysine	g	1.035		0.294	1.501	3.145
Methionine	g	0.275		0.078	0.399	0.836
Cystine	g	0.343		0.097	0.497	1.042
Phenylalanine	g	1.530		0.435	2.219	4.650
Tyrosine	g	1.285		0.365	1.863	3.905
Valine	g	1.211		0.344	1.756	3.680
Arginine	g	3.604		1.024	5.226	10.953
Histidine	g	0.780		0.222	1.131	2.370
Alanine	g	1.182		0.336	1.714	3.592
Aspartic acid	g	3.599		1.022	5.219	10.937
Glutamic acid	g	6.354		1.805	9.213	19.310
Glycine	g	1.848		0.525	2.680	5.616
Proline	g	1.299		0.369	1.884	3.948
Serine	g	1.495		0.425	2.168	4.543

¹ Values based on a mixture of Spanish peanuts and Virginia peanuts.² Wholes, halves, chopped.³ Value based on data for product without added salt. Product with added salt contains 432 mg sodium per 100 g.⁴ Alpha-tocopherol = 7.41 mg per 100 g.

Peanut Butter¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				1 tbsp = 16 g	1 c = 258 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	1.29	0.028	399	0.21 95	3.33
Food energy	{ kcal	591			1,526 396	2,682
	kj	2,474			6,383	11,222
Protein (N X 5.46)	g	28.48	0.855	559	4.56 8.18	73.48 131.93
Total lipid (fat)	g	51.14	0.066	545	2.53	40.87
Carbohydrate, total	g	15.84			0.53	71.85
Fiber	g	3.32	0.049	5	0.52	8.57
Ash	g	3.25	0.009	337	0.52	8.39
MINERALS:						
Calcium	mg	33	1.805	25	5	85
Iron	mg	1.81	0.013	447	0.29	4.67
Magnesium	mg	175	0.746	284	28	451
Phosphorus	mg	374	1.901	279	60	964
Potassium	mg	685	4.265	154	110	1,767
Sodium ²	mg	17			3	44
Zinc	mg	2.92	0.021	268	0.47	7.53
Copper	mg	0.586	0.040	14	0.094	1.512
Manganese	mg	1.608	0.128	12	0.257	4.149
VITAMINS:						
Ascorbic acid	mg	0.0			0.0	0.0
Thiamin	mg	0.147	0.034	14	0.024	0.379
Riboflavin	mg	0.105	0.011	12	0.017	0.271
Niacin	mg	13.444	0.054	447	2.151	34.686
Pantothenic acid	mg	0.920	0.077	8	0.147	2.374
Vitamin B ₆	mg	0.388	0.015	9	0.062	1.001
Folacin	mcg	82.0	8.579	10	13.1	211.5
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	8.525			1.364	21.995
4:0	g					38.669
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.024		83	0.004	0.062
14:0	g	0.048		83	0.008	0.124
16:0	g	5.789		90	0.926	14.936
18:0	g	1.940		90	0.310	5.005
Monounsaturated, total	g	24.705			3.953	63.739
16:1	g					112.062
18:1	g	23.972		90	3.836	61.848
20:1	g	0.734		85	0.117	1.894
22:1	g					
Polyunsaturated, total	g	15.398			2.464	39.727
18:2	g	15.398		90	2.464	39.727
18:3	g					69.845
18:4	g					69.845
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.344			0.055	0.888
Threonine	g	0.824			0.132	2.126
Isoleucine	g	1.106			0.177	2.853
Leucine	g	2.139			0.342	5.519
Lysine	g	1.101			0.176	2.841
Methionine	g	0.292			0.047	0.753
Cystine	g	0.365			0.058	0.942
Phenylalanine	g	1.627			0.260	4.198
Tyrosine	g	1.367			0.219	3.527
Valine	g	1.288			0.206	3.323
Arginine	g	3.834			0.613	9.892
Histidine	g	0.829			0.133	2.139
Alanine	g	1.257			0.201	3.243
Aspartic acid	g	3.829			0.613	9.879
Glutamic acid	g	6.760			1.082	17.441
Glycine	g	1.966			0.315	5.072
Proline	g	1.382			0.221	3.566
Serine	g	1.591			0.255	4.105

¹ Smooth type.² Value based on data for product without added salt. Product with added salt contains 469 mg sodium per 100 g.

Peanut Flour, defatted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 tbsp = 4 g	1 c = 60 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	7.80	0.800	2	0.31 13 55	4.68 196 821	
Food energy	{ kcal	327				35.38 1,483	
	kJ	1,368				6,205	
Protein (N X 5.46)	g	52.20	2.403	2	2.09	236.78	
Total lipid (fat)	g	0.55	0.050	2	0.02	0.33 2.49	
Carbohydrate, total	g	34.70			1.39	20.82 157.40	
Fiber	g	4.05	0.550	2	0.16	2.43 18.37	
Ash	g	4.75	0.150	2	0.19	2.85 21.55	
MINERALS:							
Calcium	mg	140		1	6	84 1.26	
Iron	mg	2.10		1	0.08	9.53	
Magnesium	mg	370		1	15	222 1,678	
Phosphorus	mg	760		1	30	456 3,447	
Potassium	mg	1,290		1	52	774 5,851	
Sodium ¹	mg	16			1	9 72	
Zinc	mg	5.10		1	0.20	3.06 23.13	
Copper	mg	1.800		1	0.072	1.080 8.165	
Manganese	mg	4.900		1	0.196	2.940 22.226	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.700		1	0.028	0.420 3.175	
Riboflavin	mg	0.480		1	0.019	0.288 2.177	
Niacin	mg	27.000		1	1.080	16.200 122.472	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.063			0.003	0.038	
4:0	g					0.286	
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.000			0.000	0.000	
16:0	g	0.048			0.002	0.029	
18:0	g	0.010			0.000	0.006	
Monounsaturated, total	g	0.225			0.009	0.135	
16:1	g	0.000			0.000	0.000	
18:1	g	0.219			0.009	0.131	
20:1	g	0.006			0.000	0.004	
22:1	g					0.027	
Polyunsaturated, total	g	0.143			0.006	0.086	
18:2	g	0.143			0.006	0.086	
18:3	g	0.000			0.000	0.000	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.631			0.025	0.379	
Threonine	g	1.510			0.060	0.906	
Isoleucine	g	2.027			0.081	1.216	
Leucine	g	3.920			0.157	2.352	
Lysine	g	2.017			0.081	1.210	
Methionine	g	0.535			0.021	0.321	
Cystine	g	0.669			0.027	0.401	
Phenylalanine	g	2.983			0.119	1.790	
Tyrosine	g	2.505			0.100	1.503	
Valine	g	2.361			0.094	1.417	
Arginine	g	7.027			0.281	4.216	
Histidine	g	1.520			0.061	0.912	
Alanine	g	2.304			0.092	1.382	
Aspartic acid	g	7.017			0.281	4.210	
Glutamic acid	g	12.390			0.496	7.434	
Glycine	g	3.604			0.144	2.162	
Proline	g	2.533			0.101	1.520	
Serine	g	2.916			0.117	1.750	

¹ Value based on data for product without added salt. Product with added salt contains 180 mg sodium per 100 g.

Pecans, dried
Carya illinoensis

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 47%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c halves = 108 g ²		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	4.82	0.234	27	1.37	5.20	
Food energy	{ kcal	667		190	721	11.58	
Food energy	{ kJ	2,792		793	3,015	1,604	
Protein (N X 5.30)	g	7.75	0.427	10	2.20	6,712	
Total lipid (fat)	g	67.64	1.268	11	19.21	18.63	
Carbohydrate, total	g	18.24			5.18	162.61	
Fiber	g	1.60	0.097	8	0.45	43.84	
Ash	g	1.56	0.036	10	0.44	3.84	
MINERALS:							
Calcium	mg	36	4.524	29	10	87	
Iron	mg	2.13	0.062	30	0.60	5.11	
Magnesium	mg	128	3.786	30	36	307	
Phosphorus	mg	291	21.177	29	83	699	
Potassium	mg	392	28.954	30	111	942	
Sodium	mg	1	0.368	30	0	3	
Zinc	mg	5.47	0.276	31	1.55	13.15	
Copper	mg	1.182	0.254	31	0.336	2.842	
Manganese ³	mg	4.506	0.438	30	1.280	10.832	
VITAMINS:							
Ascorbic acid	mg	2.0			0.6	4.7	
Thiamin	mg	0.848			0.241	2.039	
Riboflavin	mg	0.128			0.036	0.308	
Niacin	mg	0.887			0.252	0.958	
Pantothenic acid	mg	1.707			0.485	2.132	
Vitamin B ₆	mg	0.188	0.004	2	0.053	4.104	
Folacin	mcg	39.2	9.740	9	11.1	0.452	
Vitamin B ₁₂	mcg	0			0	94.1	
Vitamin A	{ RE	13			4	0	
Vitamin A	{ IU	128			36	31	
LIPIDS:					138	308	
Fatty acids:							
Saturated, total	g	5.419			1.539	13.027	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	4.137		82	1.175	4.468	
18:0	g	1.002		82	0.285	9.945	
Monounsaturated, total	g	42.161			11.974	2.409	
16:1	g	0.310		10	0.088	101.355	
18:1	g	41.172		83	11.693	0.745	
20:1	g	0.465		8	0.132	44.466	
22:1	g					98.977	
Polysaturated, total	g	16.746			0.132	0.502	
18:2	g	15.983		83	4.756	1.118	
18:3	g	0.677		39	4.539	40.257	
18:4	g				17.262	38.423	
20:4	g				0.192	1.628	
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg	108		31	0	260	
AMINO ACIDS:					117		
Tryptophan	g	0.199			0.057	0.478	
Threonine	g	0.253		10	0.072	0.608	
Isoleucine	g	0.322		10	0.091	0.774	
Leucine	g	0.520		10	0.148	1.250	
Lysine	g	0.292		10	0.083	0.702	
Methionine	g	0.186		10	0.053	0.447	
Cystine	g	0.209		6	0.059	0.502	
Phenylalanine	g	0.409		10	0.116	0.983	
Tyrosine	g	0.284		10	0.081	0.683	
Valine	g	0.386		10	0.110	0.928	
Arginine	g	1.105		10	0.314	2.656	
Histidine	g	0.227		10	0.064	0.546	
Alanine	g	0.338		10	0.096	0.813	
Aspartic acid	g	0.708		10	0.201	1.702	
Glutamic acid	g	1.545		10	0.439	3.714	
Glycine	g	0.377		10	0.107	0.906	
Proline	g	0.360		10	0.102	0.865	
Serine	g	0.376		10	0.107	0.904	

¹ 1 oz kernel halves = approx. 16 mammoth (250 or less per pound), 20 Jumbo (301-350 per pound), or 31 large (451-550 per pound).

² 1 cup chopped = 119 g; 1 cup ground = 95 g.

³ Alpha-tocopherol = 3.10 mg per 100 g.

Pecans, dry roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
	A	B	C	D	E	F	G
PROXIMATE:						
Water	g	1.10	1	0.31		4.99
Food energy	{ kcal	659		187		2,990
	{ kJ	2,758		783		12,511
Protein (N X 5.30)	g	7.97	1	2.26		36.16
Total lipid (fat)	g	64.60	1	18.35		293.03
Carbohydrate, total	g	22.33		6.34		101.28
Fiber	g	1.66		0.47		7.52
Ash	g	4.00	1	1.14		18.14
MINERALS:						
Calcium	mg	35		10		159
Iron	mg	2.18		0.62		9.90
Magnesium	mg	133		38		604
Phosphorus	mg	304		86		1,378
Potassium	mg	370		105		1,680
Sodium ¹	mg	1		0		6
Zinc	mg	5.68		1.61		25.76
Copper	mg	1.236		0.351		5.606
Manganese	mg	4.706		1.337		21.346
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.317		0.090		1.438
Riboflavin	mg	0.106		0.030		0.481
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg	40.7		11.6		184.5
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	5.175		1.470		23.474
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	3.951		1.122		17.922
18:0	g	0.957		0.272		4.341
Monounsaturated, total	g	40.265		11.435		182.642
16:1	g			0.084		1.343
18:1	g	39.321		11.167		178.360
20:1	g	0.444		0.126		2.014
Polyunsaturated, total	g	15.993		4.542		72.544
18:2	g	15.264		4.335		69.238
18:3	g	0.647		0.184		2.935
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.205		0.058		0.930
Threonine	g	0.260		0.074		1.179
Isoleucine	g	0.331		0.094		1.501
Leucine	g	0.535		0.152		2.427
Lysine	g	0.301		0.085		1.365
Methionine	g	0.191		0.054		0.866
Cystine	g	0.215		0.061		0.975
Phenylalanine	g	0.421		0.120		1.910
Tyrosine	g	0.292		0.083		1.325
Valine	g	0.397		0.113		1.801
Arginine	g	1.137		0.323		5.157
Histidine	g	0.233		0.066		1.057
Alanine	g	0.347		0.099		1.574
Aspartic acid	g	0.728		0.207		3.302
Glutamic acid	g	1.590		0.452		7.212
Glycine	g	0.388		0.110		1.760
Proline	g	0.370		0.105		1.678
Serine	g	0.387		0.110		1.755

¹ Value based on data for product without added salt. Product with added salt contains 780 mg sodium per 100 g.

Pecans, oil roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	G
				1 oz = 28.4 g ¹	1 c = 110 g		
A	B	C	D	E	F		G
PROXIMATE:							
Water	g	4.20	1	1.19	4.62	19.05	
Food energy	{ kcal	685	195	754	3,109		
	{ kJ	2,868	814	3,154	13,008		
Protein (Nx 5.30)	g	6.95	1	1.97	7.65	31.54	
Total lipid (fat)	g	71.20	1	20.22	78.32	322.96	
Carbohydrate, total	g	16.05		4.56	17.65	72.78	
Fiber	g	1.61		0.46	1.77	7.28	
Ash	g	1.60	1	0.45	1.76	7.26	
MINERALS:							
Calcium	mg	34		10	37	154	
Iron	mg	2.11		0.60	2.33	9.59	
Magnesium	mg	129		37	142	585	
Phosphorus	mg	294		84	324	1,334	
Potassium	mg	359		102	395	1,627	
Sodium ²	mg	1		0	1	6	
Zinc	mg	5.50		1.56	6.05	24.95	
Copper	mg	1.197		0.340	1.317	5.430	
Manganese	mg	4.558		1.294	5.014	20.675	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.704		1.620	6.274	25.873	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g						
18:0	g	4.355		1.237	4.791	19.754	
Monounsaturated, total	g	1.055		0.300	1.161	4.785	
16:1	g	44.379		12.604	48.817	201.303	
18:1	g	0.326		0.093	0.359	1.479	
20:1	g	43.338		12.308	47.672	196.581	
22:1	g	0.489		0.139	0.538	2.218	
Polysaturated, total	g	17.627		5.006	19.390	79.956	
18:2	g	16.824		4.778	18.506	76.314	
18:3	g	0.713		0.202	0.784	3.234	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.178		0.051	0.196	0.807	
Threonine	g	0.227		0.064	0.250	1.030	
Isoleucine	g	0.289		0.082	0.318	1.311	
Leucine	g	0.467		0.133	0.514	2.118	
Lysine	g	0.262		0.074	0.288	1.188	
Methionine	g	0.167		0.047	0.184	0.758	
Cystine	g	0.188		0.053	0.207	0.853	
Phenylalanine	g	0.367		0.104	0.404	1.665	
Tyrosine	g	0.255		0.072	0.281	1.157	
Valine	g	0.346		0.098	0.381	1.569	
Arginine	g	0.992		0.282	1.091	4.500	
Histidine	g	0.203		0.058	0.223	0.921	
Alanine	g	0.303		0.086	0.333	1.374	
Aspartic acid	g	0.635		0.180	0.699	2.880	
Glutamic acid	g	1.387		0.394	1.526	6.291	
Glycine	g	0.338		0.096	0.372	1.533	
Proline	g	0.323		0.092	0.355	1.465	
Serine	g	0.337		0.096	0.371	1.529	

¹ 1 oz = 15 halves.² Value based on data for product without added salt. Product with added salt contains 756 mg sodium per 100 g.

NUTS

Pecan Flour

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight	Refuse: 0	
	A	B	C	D	E	F	G
1 oz = 28.4 g						
PROXIMATE:						
Water	g	10.70	1	3.04	48.54	
Food energy	{ kcal	329		93	1,492	
	kJ	1,377		391	6,244	
Protein (Nx 5.30)	g	31.87	1	9.05	144.58	
Total lipid (fat)	g	1.43	1	0.41	6.49	
Carbohydrate, total	g	50.73		14.41	230.09	
Fiber	g	1.50		0.43	6.79	
Ash	g	5.27	1	1.50	23.90	
MINERALS:						
Calcium	mg	32		9	144	
Iron	mg	1.97		0.56	8.94	
Magnesium	mg	120		34	545	
Phosphorus	mg	274		78	1,244	
Potassium	mg	334		95	1,517	
Sodium	mg	1		0	5	
Zinc	mg	5.13		1.46	23.26	
Copper	mg	1.116		0.317	5.062	
Manganese	mg	4.249		1.207	19.273	
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.095		0.027	0.431	
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	0.072		0.020	0.327	
18:0	g	0.017		0.005	0.077	
Monounsaturated, total	g	0.736		0.209	3.338	
16:1	g	0.005		0.001	0.023	
18:1	g	0.718		0.204	3.257	
20:1	g	0.008		0.002	0.036	
22:1	g					
Polysaturated, total	g	0.292		0.083	1.325	
18:2	g	0.279		0.079	1.266	
18:3	g	0.012		0.003	0.054	
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.818		0.232	3.710	
Threonine	g	1.040		0.295	4.717	
Isoleucine	g	1.323		0.376	6.001	
Leucine	g	2.141		0.608	9.712	
Lysine	g	1.203		0.342	5.457	
Methionine	g	0.764		0.217	3.466	
Cystine	g	0.860		0.244	3.901	
Phenylalanine	g	1.684		0.478	7.639	
Tyrosine	g	1.167		0.331	5.294	
Valine	g	1.588		0.451	7.203	
Arginine	g	4.547		1.291	20.625	
Histidine	g	0.932		0.265	4.228	
Alanine	g	1.389		0.394	6.301	
Aspartic acid	g	2.911		0.827	13.204	
Glutamic acid	g	6.357		1.805	28.835	
Glycine	g	1.552		0.441	7.040	
Proline	g	1.479		0.420	6.709	
Serine	g	1.546		0.439	7.013	

NUTS

Pilinuta-Canarytree, dried
Canarium ovatum

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 81%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c = 120 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	2.77	1	0.79	3.32	2.38	
Food energy	{ kcal	719		204	863	619	
	kJ	3,010		855	3,612	2,592	
Protein (N X 5.30)	g	10.80	1	3.07	12.96	9.30	
Total lipid (fat)	g	79.55	1	22.59	95.46	68.49	
Carbohydrate, total	g	3.98		1.13	4.77	3.43	
Fiber	g	2.80		0.80	3.36	2.41	
Ash	g	2.91		0.83	3.49	2.50	
MINERALS:							
Calcium	mg	145		41	174	125	
Iron	mg	3.53		1.00	4.23	3.04	
Magnesium	mg						
Phosphorus	mg	575		163	690	495	
Potassium	mg	507		144	609	437	
Sodium	mg	3		1	4	3	
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.913		0.259	1.096	0.786	
Riboflavin	mg	0.093		0.026	0.112	0.080	
Niacin	mg	0.519		0.147	0.623	0.447	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	4		1	5	4	
	IU	41		12	50	36	
LIPIDS:							
Fatty acids:							
Saturated, total	g	31.184		8.856	37.421	26.849	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	22.035	1	6.258	26.442	18.972	
18:0	g	9.148	1	2.598	10.978	7.876	
Monounsaturated, total	g	37.229		10.573	44.675	32.054	
16:1	g						
18:1	g	37.229	1	10.573	44.675	32.054	
20:1	g						
22:1	g						
Polyunsaturated, total	g	7.605		2.160	9.126	6.548	
18:2	g	7.605	1	2.160	9.126	6.548	
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g						
Threonine	g	0.407	1	0.116	0.488	0.350	
Isoleucine	g	0.483	1	0.137	0.580	0.416	
Leucine	g	0.890	1	0.253	1.068	0.766	
Lysine	g	0.369	1	0.105	0.443	0.318	
Methionine	g	0.395	1	0.112	0.474	0.340	
Cystine	g						
Phenylalanine	g	0.497	1	0.141	0.596	0.428	
Tyrosine	g	0.381	1	0.108	0.457	0.328	
Valine	g	0.701	1	0.199	0.841	0.604	
Arginine	g	1.516	1	0.431	1.819	1.305	
Histidine	g	0.255	1	0.072	0.306	0.220	
Alanine	g	0.509	1	0.145	0.611	0.438	
Aspartic acid	g	1.222	1	0.347	1.466	1.052	
Glutamic acid	g	2.393	1	0.680	2.872	2.060	
Glycine	g	0.650	1	0.185	0.780	0.560	
Proline	g	0.471	1	0.134	0.565	0.406	
Serine	g	0.599	1	0.170	0.719	0.516	

¹ 1 oz = approx. 15 kernels.

Pine Nuts, Pignolia, dried
Pinus pinea

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 23%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 tbsp = 10 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	6.69	0.285	2	1.90	0.67	
Food energy	{ kcal	515		146	51	23.34	
Protein (N X 5.30)	g	24.00		612	215	1,798	
Total lipid (fat)	g	50.70	1.599	2	14.40	7,521	
Carbohydrate, total	g	14.22			4.04	83.80	
Fiber	g	0.80			1.42	177.04	
Ash	g	4.40		1	0.23	49.66	
					0.08	2.79	
				1	1.25	15.36	
					0.44		
MINERALS:							
Calcium	mg	26		1	7	92	
Iron	mg	9.20		1	2.61	32.13	
Magnesium	mg						
Phosphorus	mg	508		1	144	1,774	
Potassium	mg	599		170	60	2,093	
Sodium	mg	4			1	14	
Zinc	mg	4.25			1.21	0.42	
Copper	mg	1.026			0.291	14.83	
Manganese	mg				0.103	3.583	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.810		1	0.230	0.081	
Riboflavin	mg	0.190		1	0.054	0.019	
Niacin	mg	3.570		1	1.014	0.357	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	7.797			2.214	0.780	
4:0	g					27.227	
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	3.672		4	1.043	0.367	
18:0	g	1.672		4	0.475	0.167	
Monounsaturated, total	g	19.076			5.418	12.823	
16:1	g	0.208		1	0.059	0.021	
18:1	g	17.900		4	5.084	0.726	
20:1	g	0.968		1	0.275	62.507	
22:1	g				0.097	3.380	
Polysaturated, total	g	21.343			6.061	74.530	
18:2	g	20.689		4	5.876	72.246	
18:3	g	0.654		4	0.186	2.284	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg	141			40	14	
						492	
AMINO ACIDS:							
Tryptophan	g	0.303		2	0.086	0.030	
Threonine	g	0.761		4	0.216	0.076	
Isoleucine	g	0.933		4	0.265	0.093	
Leucine	g	1.730		4	0.491	0.173	
Lysine	g	0.901		4	0.256	0.090	
Methionine	g	0.430		4	0.122	0.043	
Cystine	g	0.435		3	0.124	0.044	
Phenylalanine	g	0.919		4	0.261	0.092	
Tyrosine	g	0.878		4	0.249	0.088	
Valine	g	1.241		4	0.352	0.124	
Arginine	g	4.668		4	1.326	0.467	
Histidine	g	0.575		4	0.163	0.058	
Alanine	g	1.254		4	0.356	0.125	
Aspartic acid	g	2.187		4	0.621	0.219	
Glutamic acid	g	4.084		4	1.160	0.408	
Glycine	g	1.223		4	0.347	0.122	
Proline	g	1.290		4	0.366	0.129	
Serine	g	1.019		4	0.289	0.102	

NUTS

Pine Nuts, Pinyon, dried
Pinus edulis

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	10 kernels = 1 g	Refuse: Shells 43%
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	5.90	1	1.68	0.06	15.25	
Food energy	{ kcal	568	161	6	1,468		
	kJ	2,377	675	24	6,144		
Protein (N X 5.30)	g	11.57	1	3.29	0.12	29.91	
Total lipid (fat)	g	60.98	1	17.32	0.61	157.62	
Carbohydrate, total	g	19.30		5.48	0.19	49.88	
Fiber	g	4.71	1	1.34	0.05	12.16	
Ash	g	2.26	1	0.64	0.02	5.84	
MINERALS:							
Calcium	mg	8	2	2	0	21	
Iron	mg	3.06	0.236	0.87	0.03	7.90	
Magnesium	mg	234	15.199	2	67	606	
Phosphorus	mg	35	20.423	2	10	89	
Potassium	mg	628	67.103	2	178	1,624	
Sodium	mg	72	4.376	2	20	186	
Zinc	mg	4.28	0.141	2	1.22	0.04	11.07
Copper	mg	1.035	0.000	2	0.294	0.010	2.675
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	2.0		0.6	0.0	5.0	
Thiamin	mg	1.243		0.353	0.012	3.213	
Riboflavin	mg	0.223		0.063	0.002	0.576	
Niacin	mg	4.370		1.241	0.044	11.296	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE	3		1	0	8	
	IU	29		8	0	75	
LIPIDS:							
Fatty acids:							
Saturated, total	g	9.377		2.663	0.094	24.240	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	4.416		1.254	0.044	11.415	
18:0	g	2.011		0.571	0.020	5.198	
Monounsaturated, total	g	22.942		6.516	0.229	59.305	
16:1	g	0.250		0.071	0.003	0.646	
18:1	g	21.528		6.114	0.215	55.650	
20:1	g	1.164		0.331	0.012	3.009	
22:1	g						
Polyunsaturated, total	g	25.668		7.290	0.257	66.352	
18:2	g	24.882		7.066	0.249	64.320	
18:3	g	0.787		0.224	0.008	2.034	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.146		0.041	0.001	0.377	
Threonine	g	0.367		0.104	0.004	0.949	
Isoleucine	g	0.450		0.128	0.005	1.163	
Leucine	g	0.834		0.237	0.008	2.156	
Lysine	g	0.434		0.123	0.004	1.122	
Methionine	g	0.207		0.059	0.002	0.535	
Cystine	g	0.210		0.060	0.002	0.543	
Phenylalanine	g	0.443		0.126	0.004	1.145	
Tyrosine	g	0.424		0.120	0.004	1.096	
Valine	g	0.598		0.170	0.006	1.546	
Arginine	g	2.251		0.639	0.023	5.819	
Histidine	g	0.277		0.079	0.003	0.716	
Alanine	g	0.605		0.172	0.006	1.564	
Aspartic acid	g	1.054		0.299	0.011	2.725	
Glutamic acid	g	1.969		0.559	0.020	5.090	
Glycine	g	0.589		0.167	0.006	1.523	
Proline	g	0.622		0.177	0.006	1.608	
Serine	g	0.491		0.139	0.005	1.269	

NUTS

Pistachio Nuts, dried
Pistacia vera

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: Shells 50%	
				1 oz = 28.4 g ¹	1 c = 128 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.87	0.226	31	1.10 164	4.95 739	8.77 1,309
Food energy	{ kcal	577 2,416			686	3,092	5,479
Protein (N X 5.30)	g	20.58	0.776	31	5.84	26.34	46.68
Total lipid (fat)	g	48.39	1.353	31	13.74	61.94	109.74
Carbohydrate, total	g	24.81			7.05	31.75	56.26
Fiber	g	1.88			0.53	2.40	4.26
Ash	g	2.40			0.68	3.07	5.45
MINERALS:							
Calcium	mg	135	5.802	11	38	173	307
Iron	mg	6.78	0.605	11	1.92 45	8.67 203	15.37 359
Magnesium	mg	158			143	644	1,142
Phosphorus	mg	503			310	1,399	2,479
Potassium	mg	1,093	12.089	10	2	7	13
Sodium	mg	6	0.638	10	0.38	1.71	3.03
Zinc	mg	1.34	1.035	2	0.338	1.522	2.697
Copper	mg	1.189	0.057	10	0.093	0.419	0.742
Manganese ²	mg	0.327					
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.820		1	0.233	1.050	1.860
Riboflavin	mg	0.174	0.045	2	0.049	0.223	0.395
Niacin	mg	1.080		1	0.307	1.382	2.449
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg	58.0		1	16.5	74.2	131.5
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	23			7	30	53
	IU	233			66	299	530
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.127			1.740	7.843	13.896
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.045		2	0.013	0.058	0.102
16:0	g	5.349		29	1.519	6.847	12.132
18:0	g	0.628		29	0.178	0.804	1.424
Monounsaturated, total	g	32.668			9.278	41.815	74.091
16:1	g	0.286		29	0.081	0.366	0.649
18:1	g	31.976		30	9.081	40.929	72.522
20:1	g	0.220		3	0.062	0.282	0.499
22:1	g						
Polyunsaturated, total	g	7.316			2.078	9.364	16.593
18:2	g	7.022		30	1.994	8.988	15.926
18:3	g	0.252		24	0.072	0.323	0.572
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg	108			31	138	245
AMINO ACIDS:							
Tryptophan	g	0.283		2	0.080	0.362	0.642
Threonine	g	0.722		2	0.205	0.924	1.637
Isoleucine	g	0.975		2	0.277	1.248	2.211
Leucine	g	1.677		2	0.476	2.147	3.803
Lysine	g	1.278		2	0.363	1.636	2.899
Methionine	g	0.381		2	0.108	0.488	0.864
Cystine	g	0.513		2	0.146	0.657	1.163
Phenylalanine	g	1.184		2	0.336	1.516	2.685
Tyrosine	g	0.714		2	0.203	0.914	1.619
Valine	g	1.410		2	0.400	1.805	3.198
Arginine	g	2.186		2	0.621	2.798	4.958
Histidine	g	0.536		2	0.152	0.686	1.216
Alanine	g	0.994		2	0.282	1.272	2.254
Aspartic acid	g	2.116		2	0.601	2.708	4.799
Glutamic acid	g	4.916		2	1.396	6.292	11.149
Glycine	g	1.095		2	0.311	1.402	2.483
Proline	g	0.947		2	0.269	1.212	2.148
Serine	g	1.351		2	0.384	1.729	3.064

¹ 1 oz = approx. 47 kernels.² Alpha-tocopherol = 5.21 mg per 100 g.

Pistachio Nuts, dry roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 48%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 128 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	2.09		0.59	2.67	4.92	
Food energy	{ kcal	606		172	776	1,429	
	kJ	2,539		721	3,250	5,987	
Protein (N X 5.30)	g	14.93	1	4.24	19.11	35.20	
Total lipid (fat)	g	52.82	1	15.00	67.61	124.54	
Carbohydrate, total	g	27.53		7.82	35.24	64.92	
Fiber	g	1.80		0.51	2.31	4.25	
Ash	g	2.63		0.75	3.37	6.20	
MINERALS:							
Calcium	mg	70	1	20	90	166	
Iron	mg	3.17	1	0.90	4.06	7.47	
Magnesium	mg	130		37	166	307	
Phosphorus	mg	476		135	609	1,122	
Potassium	mg	970	1	275	1,242	2,287	
Sodium	mg	6		2	8	14	
Zinc	mg	1.36		0.39	1.74	3.21	
Copper	mg	1.211		0.344	1.550	2.856	
Manganese	mg	0.333		0.095	0.426	0.785	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.423	1	0.120	0.541	0.997	
Riboflavin	mg	0.246	1	0.070	0.315	0.580	
Niacin	mg	1.408	1	0.400	1.802	3.320	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.688		1.899	8.561	15.770	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.050		0.014	0.064	0.118	
16:0	g	5.838		1.658	7.473	13.766	
18:0	g	0.685		0.195	0.877	1.615	
Monounsaturated, total	g	35.659		10.127	45.644	84.084	
16:1	g	0.313		0.089	0.401	0.738	
18:1	g	34.904		9.913	44.677	82.304	
20:1	g	0.240		0.068	0.307	0.566	
22:1	g						
Polynsaturated, total	g	7.986		2.268	10.222	18.831	
18:2	g	7.665		2.177	9.811	18.074	
18:3	g	0.275		0.078	0.352	0.648	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.206		0.059	0.264	0.486	
Threonine	g	0.524		0.149	0.671	1.236	
Isoleucine	g	0.707		0.201	0.905	1.667	
Leucine	g	1.217		0.346	1.558	2.870	
Lysine	g	0.927		0.263	1.187	2.186	
Methionine	g	0.276		0.078	0.353	0.651	
Cystine	g	0.372		0.106	0.476	0.877	
Phenylalanine	g	0.859		0.244	1.100	2.026	
Tyrosine	g	0.518		0.147	0.663	1.221	
Valine	g	1.023		0.291	1.309	2.412	
Arginine	g	1.586		0.450	2.030	3.740	
Histidine	g	0.389		0.110	0.498	0.917	
Alanine	g	0.721		0.205	0.923	1.700	
Aspartic acid	g	1.535		0.436	1.965	3.620	
Glutamic acid	g	3.566		1.013	4.564	8.409	
Glycine	g	0.794		0.225	1.016	1.872	
Proline	g	0.687		0.195	0.879	1.620	
Serine	g	0.980		0.278	1.254	2.311	

¹ Value based on data for product without added salt. Product with added salt contains 780 mg sodium per 100 g.

NUTS

Soybean Kernels, roasted and toasted

Glycine max

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				1 oz = 28.4 g ¹	1 c whole kernels = 108 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	4.23	1.299	3	1.20	4.57
Food energy	{ kcal	453		129	490	2,056
	{ kJ	1,896		539	2,048	8,602
Protein (Nx 5.71)	g	37.00	1.846	3	10.51	39.96
Total lipid (fat)	g	23.95	1.950	2	6.80	25.87
Carbohydrate, total	g	30.57			8.68	33.01
Fiber	g	3.55	1.050	2	1.01	3.83
Ash	g	4.25	0.750	2	1.21	4.59
MINERALS:						
Calcium	mg	138		1	39	149
Iron	mg	4.45	0.550	2	1.26	4.81
Magnesium	mg	173	27.504	2	49	186
Phosphorus	mg	363		1	103	392
Potassium	mg	1,470		1	417	1,588
Sodium ²	mg	4			1	4
Zinc	mg	3.62	0.480	2	1.03	3.91
Copper	mg	1.064	0.236	2	0.302	1.149
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	2.2		1	0.6	2.4
Thiamin	mg	0.100		1	0.028	0.108
Riboflavin	mg	0.145		1	0.041	0.157
Niacin	mg	1.755	0.345	2	0.498	1.895
Pantothenic acid	mg	0.453		1	0.129	0.489
Vitamin B ₆	mg	0.299	0.091	2	0.085	0.323
Folacin	mcg	225.5	14.502	2	64.0	243.5
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE	20		1	6	22
	{ IU	200		1	57	216
LIPIDS:						
Fatty acids:						
Saturated, total	g	3.168			0.900	3.421
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.024			0.007	0.026
16:0	g	2.266			0.644	2.447
18:0	g	0.910			0.258	0.983
Monounsaturated, total	g	5.580			1.585	6.026
16:1	g	0.048			0.014	0.052
18:1	g	5.016			1.425	5.417
20:1	g	0.044			0.012	0.048
22:1	g					
Polyunsaturated, total	g	12.738			3.618	13.757
18:2	g	12.215			3.469	13.192
18:3	g	1.496			0.425	1.616
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.564		61	0.160	0.609
Threonine	g	1.607		148	0.456	1.736
Isoleucine	g	1.884		132	0.535	2.035
Leucine	g	3.013		132	0.856	3.254
Lysine	g	2.584		156	0.734	2.791
Methionine	g	0.499		162	0.142	0.539
Cystine	g	0.626		137	0.178	0.676
Phenylalanine	g	1.931		132	0.548	2.085
Tyrosine	g	1.469		127	0.417	1.587
Valine	g	1.847		132	0.525	1.995
Arginine	g	3.012		131	0.855	3.253
Histidine	g	0.998		131	0.283	1.078
Alanine	g	1.829		126	0.519	1.975
Aspartic acid	g	4.653		126	1.321	5.025
Glutamic acid	g	7.521		126	2.136	8.123
Glycine	g	1.711		127	0.486	1.848
Proline	g	2.271		141	0.645	2.453
Serine	g	2.145		142	0.609	2.317

¹ 1 oz = approx. 95 kernels.² Value based on product without added salt. Product made with added salt contains 163 mg sodium per 100 g.

Walnuts, Black, dried
Juglans nigra

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Shells 76%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c chopped = 125 g ¹		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	4.36	0.189	10	1.24	5.45	
Food energy	{ kcal	607		172	759	4.74	
	{ kJ	2,541		722	3,176	661	
Protein (N X 5.30)	g	24.35	0.276	10	6.91	26.49	
Total lipid (fat)	g	56.58	0.250	30	16.07	61.56	
Carbohydrate, total	g	12.10			3.44	13.16	
Fiber	g	6.46	0.351	10	1.83	8.08	
Ash	g	2.61	0.046	10	0.74	3.26	
MINERALS:							
Calcium	mg	58	1.619	15	16	72	
Iron	mg	3.07	0.159	15	0.87	3.84	
Magnesium	mg	202	6.019	15	57	252	
Phosphorus	mg	464	16.316	15	132	580	
Potassium	mg	524	18.196	15	149	655	
Sodium	mg	1	0.112	12	0	2	
Zinc	mg	3.42	0.137	15	0.97	4.28	
Copper	mg	1.020	0.063	15	0.290	1.275	
Manganese	mg	4.271	0.142	15	1.213	5.339	
VITAMINS:							
Ascorbic acid	mg				0.062	0.271	
Thiamin	mg	0.217			0.031	0.136	
Riboflavin	mg	0.109			0.196	0.863	
Niacin	mg	0.690				0.751	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	30		8	37	32	
	{ IU	296		84	370	322	
LIPIDS:							
Fatty acids:							
Saturated, total	g	3.628			1.030	4.535	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	2.126		5	0.604	2.658	
18:0	g	1.394		5	0.396	1.743	
Monounsaturated, total	g	12.727			3.614	15.909	
16:1	g	0.077		2	0.022	0.096	
18:1	g	11.856		6	3.367	14.820	
20:1	g	0.548		2	0.156	0.685	
22:1	g						
Polyunsaturated, total	g	37.492			10.648	46.865	
18:2	g	33.459		6	9.502	41.824	
18:3	g	3.306		6	0.939	4.133	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.322		10	0.091	0.403	
Threonine	g	0.730		7	0.207	0.913	
Isoleucine	g	0.978		7	0.278	1.223	
Leucine	g	1.704		7	0.484	2.130	
Lysine	g	0.721		7	0.205	0.901	
Methionine	g	0.473		15	0.134	0.591	
Cystine	g	0.468		15	0.133	0.585	
Phenylalanine	g	1.107		7	0.314	1.384	
Tyrosine	g	0.749		7	0.213	0.936	
Valine	g	1.286		7	0.365	1.608	
Arginine	g	3.661		7	1.040	4.576	
Histidine	g	0.680		7	0.193	0.850	
Alanine	g	1.061		7	0.301	1.326	
Aspartic acid	g	2.462		7	0.699	3.078	
Glutamic acid	g	5.213		7	1.480	6.516	
Glycine	g	1.203		7	0.342	1.504	
Proline	g	0.937		7	0.266	1.171	
Serine	g	1.240		7	0.352	1.550	

¹ 1 cup finely ground = 80 g.

Walnuts, English or Persian, dried
Juglans regia

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: Shells 55%
				1 oz = 28.4 g ¹	1 c pieces or chips = 120 g ²	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	3.65	0.311	14	1.04 182	4.37 770
Food energy	kcal	642			763	1,310
Food energy	kJ	2,686			3,224	5,483
Protein (Nx 5.30)	g	14.29	0.265	14	4.06	29.17
Total lipid (fat)	g	61.87	2.254	22	17.57	126.27
Carbohydrate, total	g	18.34			5.21	37.43
Fiber	g	4.60	1.577	6	1.31	5.52
Ash	g	1.86	0.055	12	0.53	3.79
MINERALS:						
Calcium	mg	94	6.820	7	27	113
Iron	mg	2.44	0.248	42	0.69	2.93
Magnesium	mg	169	18.639	5	48	203
Phosphorus	mg	317	24.264	7	90	380
Potassium	mg	502	37.033	5	142	602
Sodium	mg	10	2.536	5	3	12
Zinc	mg	2.73	0.106	11	0.78	3.28
Copper	mg	1.387	0.091	11	0.394	1.664
Manganese ³	mg	2.898	0.216	9	0.823	3.478
VITAMINS:						
Ascorbic acid	mg	3.2	1.546	3	0.9	3.9
Thiamin	mg	0.382	0.081	4	0.108	0.458
Riboflavin	mg	0.148	0.017	5	0.042	0.178
Niacin	mg	1.042	0.097	4	0.296	1.250
Pantothenic acid	mg	0.631	0.369	2	0.179	0.757
Vitamin B ₆	mg	0.558	0.085	2	0.158	0.670
Folacin	mcg	66.0	28.660	5	18.7	79.2
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{RE}	12	8.350	2	4	15
	IU	124	83.500	2	35	148
LIPIDS:						
Fatty acids:						
Saturated, total	g	5.586			1.586	6.703
4:0	g					11.401
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.189		3	0.054	0.227
16:0	g	4.242		26	1.205	5.090
18:0	g	1.079		26	0.306	1.295
Monounsaturated, total	g	14.175			4.026	17.010
16:1	g	0.161		6	0.046	0.193
18:1	g	13.301		27	3.777	15.961
20:1	g	0.520		2	0.148	0.624
22:1	g					1.061
Polyunsaturated, total	g	39.125			11.112	46.950
18:2	g	31.762		27	9.020	38.114
18:3	g	6.811		27	1.934	8.173
18:4	g			1	0.007	0.029
20:4	g	0.024				0.049
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg	108			31	130
AMINO ACIDS:						
Tryptophan	g	0.189		2	0.054	0.227
Threonine	g	0.448		2	0.127	0.538
Isoleucine	g	0.566		2	0.161	0.679
Leucine	g	0.992		2	0.282	1.190
Lysine	g	0.388		2	0.110	0.466
Methionine	g	0.280		3	0.080	0.336
Cystine	g	0.345		3	0.098	0.414
Phenylalanine	g	0.628		2	0.178	0.754
Tyrosine	g	0.439		2	0.125	0.527
Valine	g	0.723		2	0.205	0.868
Arginine	g	2.103		2	0.597	2.524
Histidine	g	0.359		2	0.102	0.431
Alanine	g	0.609		2	0.173	0.731
Aspartic acid	g	1.475		2	0.419	1.770
Glutamic acid	g	2.809		2	0.798	3.371
Glycine	g	0.755		2	0.214	0.906
Proline	g	0.553		2	0.157	0.664
Serine	g	0.782		2	0.222	0.938

¹ 1 oz = approx. 14 halves.² 1 cup halves = 100 g.³ Alpha-tocopherol = 2.62 mg per 100 g.

Breadfruit Seeds, raw¹
Artocarpus altilis

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight 1 oz = 28.4 g	Amount in edible portion of 1 pound of food as purchased Refuse: Shells 32%		
	Mean	Standard error	Number of samples				
	A	B	C	D	E	F	G
PROXIMATE:							
Water	g	56.27		1	15.98		173.54
Food energy	{ kcal	191		54			590
	kJ	801		228			2,471
Protein (N X 5.30)	g	7.40		1	2.10		22.82
Total lipid (fat)	g	5.59		1	1.59		17.24
Carbohydrate, total	g	29.24			8.30		90.18
Fiber	g	1.69		1	0.48		5.21
Ash	g	1.50		1	0.43		4.63
MINERALS:							
Calcium	mg	36			10		112
Iron	mg	3.67			1.04		11.32
Magnesium	mg						
Phosphorus	mg	175			50		541
Potassium	mg						
Sodium	mg						
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	6.6			1.9		20.3
Thiamin	mg	0.482			0.137		1.486
Riboflavin	mg	0.301			0.085		0.928
Niacin	mg	0.438			0.124		1.351
Pantothenic acid	mg	0.877			0.249		2.705
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0		0
Vitamin A	{ RE	26			7		79
	{ IU	256			73		789
LIPIDS:							
Fatty acids:							
Saturated, total	g	1.509			0.429		4.654
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.999		1	0.284		3.081
18:0	g	0.510		1	0.145		1.573
Monounsaturated, total	g	0.712			0.202		2.196
16:1	g	0.030		1	0.009		0.093
18:1	g	0.682		1	0.194		2.103
20:1	g						
22:1	g						
Polyunsaturated, total	g	2.977			0.845		9.181
18:2	g	2.290		1	0.650		7.062
18:3	g	0.687		1	0.195		2.119
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0		0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.123		2	0.035		0.379
Threonine	g	0.385		1	0.109		1.187
Isoleucine	g	0.443		1	0.126		1.366
Leucine	g	0.563		1	0.160		1.736
Lysine	g	0.570		1	0.162		1.758
Methionine	g	0.096		1	0.027		0.296
Cystine	g	0.116		1	0.033		0.358
Phenylalanine	g	0.797		1	0.226		2.458
Tyrosine	g	0.544		1	0.154		1.678
Valine	g	0.535		1	0.152		1.650
Arginine	g	0.494		1	0.140		1.523
Histidine	g	0.207		1	0.059		0.638
Alanine	g	0.336		1	0.095		1.036
Aspartic acid	g	0.817		1	0.232		2.520
Glutamic acid	g	1.036		1	0.294		3.195
Glycine	g	0.465		1	0.132		1.434
Proline	g	0.369		1	0.105		1.138
Serine	g	0.496		1	0.141		1.530

¹ South American cultivar.

Breadfruit Seeds, boiled¹

Nutrients and units	Amount in 100 grams, edible portion			Approximate measure and weight 1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased
	Mean A	Standard error B	Number of samples C			
						G
PROXIMATE:						
Water	g	59.30	1	16.84	96.84	
		168		48	274	
Food energy	{ kcal	702		199	1,147	
	{ kJ					
Protein (N X 5.30)	g	5.30	1	1.51	8.65	
Total lipid (fat)	g	2.30	1	0.65	3.76	
Carbohydrate, total	g	32.00		9.09	52.26	
Fiber	g	1.80	1	0.51	2.94	
Ash	g	1.10	1	0.31	1.80	
MINERALS:						
Calcium	mg	61		17	100	
Iron	mg	0.60		0.17	0.98	
Magnesium	mg					
Phosphorus	mg	124		35	202	
Potassium	mg					
Sodium	mg					
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.290		0.082	0.474	
Riboflavin	mg	0.170		0.048	0.278	
Niacin	mg	5.300		1.505	8.655	
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.621		0.176	1.014	
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	0.411		0.117	0.671	
18:0	g	0.210		0.060	0.343	
Monounsaturated, total	g	0.293		0.083	0.478	
16:1	g	0.012		0.003	0.020	
18:1	g	0.281		0.080	0.459	
20:1	g					
22:1	g					
Polysaturated, total	g	1.225		0.348	2.000	
18:2	g	0.942		0.268	1.538	
18:3	g	0.283		0.080	0.462	
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.088		0.025	0.144	
Threonine	g	0.276		0.078	0.451	
Isoleucine	g	0.317		0.090	0.518	
Leucine	g	0.403		0.114	0.658	
Lysine	g	0.408		0.116	0.666	
Methionine	g	0.069		0.020	0.113	
Cystine	g	0.083		0.024	0.136	
Phenylalanine	g	0.571		0.162	0.932	
Tyrosine	g	0.390		0.111	0.637	
Valine	g	0.383		0.109	0.625	
Arginine	g	0.354		0.101	0.578	
Histidine	g	0.148		0.042	0.242	
Alanine	g	0.241		0.068	0.394	
Aspartic acid	g	0.585		0.166	0.955	
Glutamic acid	g	0.742		0.211	1.212	
Glycine	g	0.333		0.095	0.544	
Proline	g	0.264		0.075	0.431	
Serine	g	0.355		0.101	0.580	

¹ Pacific area cultivar.

Breadfruit Seeds, roasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	49.70	1	14.11		225.44	
Food energy	{ kcal	207		59		940	
Food energy	{ kJ	867		246		3,935	
Protein (N X 5.30)	g	6.20	1	1.76		28.13	
Total lipid (fat)	g	2.70	1	0.77		12.25	
Carbohydrate, total	g	40.10		11.39		181.89	
Fiber	g	2.20	1	0.62		9.98	
Ash	g	1.30	1	0.37		5.90	
MINERALS:							
Calcium	mg	86		24		390	
Iron	mg	0.90		0.26		4.08	
Magnesium	mg						
Phosphorus	mg	175		50		794	
Potassium	mg						
Sodium	mg						
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.410		0.116		1.860	
Riboflavin	mg	0.240		0.068		1.089	
Niacin	mg	7.400		2.102		33.566	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.729		0.207		3.307	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.483		0.137		2.191	
18:0	g	0.246		0.070		1.116	
Monounsaturated, total	g	0.344		0.098		1.560	
16:1	g	0.015		0.004		0.068	
18:1	g	0.329		0.093		1.492	
20:1	g						
22:1	g						
Polyunsaturated, total	g	1.438		0.408		6.523	
18:2	g	1.106		0.314		5.017	
18:3	g	0.332		0.094		1.506	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.103		0.029		0.467	
Threonine	g	0.323		0.092		1.465	
Isoleucine	g	0.371		0.105		1.683	
Leucine	g	0.472		0.134		2.141	
Lysine	g	0.477		0.135		2.164	
Methionine	g	0.081		0.023		0.367	
Cystine	g	0.097		0.028		0.440	
Phenylalanine	g	0.668		0.190		3.030	
Tyrosine	g	0.456		0.130		2.068	
Valine	g	0.448		0.127		2.032	
Arginine	g	0.414		0.118		1.878	
Histidine	g	0.173		0.049		0.785	
Alanine	g	0.282		0.080		1.279	
Aspartic acid	g	0.684		0.194		3.103	
Glutamic acid	g	0.868		0.247		3.937	
Glycine	g	0.390		0.111		1.769	
Proline	g	0.309		0.088		1.402	
Serine	g	0.415		0.118		1.882	

¹ Pacific area cultivar.

Breadnuttree Seeds, raw
Brosimum alicastrum

Nutrients and units	Amount in 100 grams, edible portion			1 oz = 28.4 g ¹	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased			
	Mean	Standard error	Number of samples						
A	B	C	D	E	F	G			
PROXIMATE:									
Water	g	45.00	5.000	2	12.78	204.12			
	kcal	217			62	986			
Food energy	kJ	909			258	4,125			
Protein (N X 5.30)	g	5.97		1	1.69	27.07			
Total lipid (fat)	g	0.99			0.28	4.49			
Carbohydrate, total	g	46.28			13.14	209.94			
Fiber	g	2.53		1	0.72	11.48			
Ash	g	1.76		1	0.50	7.98			
MINERALS:									
Calcium	mg	98		1	28	444			
Iron	mg	2.09		1	0.59	9.48			
Magnesium	mg								
Phosphorus	mg	67		1	19	304			
Potassium	mg								
Sodium	mg								
Zinc	mg								
Copper	mg								
Manganese	mg								
VITAMINS:									
Ascorbic acid	mg	27.4		1	7.8	124.2			
Thiamin	mg	0.055		1	0.016	0.249			
Riboflavin	mg	0.055		1	0.016	0.249			
Niacin	mg	0.880		1	0.250	3.992			
Pantothenic acid	mg								
Vitamin B ₆	mg								
Folacin	mcg								
Vitamin B ₁₂	mcg	0			0	0			
Vitamin A	{RE.	25		1	7	112			
	IU	248		1	70	1,123			
LIPIDS:									
Fatty acids:									
Saturated, total	g	0.267			0.076	1.211			
4:0	g								
6:0	g								
8:0	g								
10:0	g								
12:0	g								
14:0	g								
16:0	g	0.177			0.050	0.803			
18:0	g	0.090			0.026	0.408			
Monounsaturated, total	g	0.126			0.036	0.572			
16:1	g	0.005			0.001	0.023			
18:1	g	0.121			0.034	0.549			
20:1	g								
22:1	g								
Polysaturated, total	g	0.527			0.150	2.390			
18:2	g	0.406			0.115	1.842			
18:3	g	0.122			0.035	0.553			
18:4	g								
20:4	g								
20:5	g								
22:5	g								
22:6	g								
Cholesterol	mg	0			0	0			
Phytosterols	mg								
AMINO ACIDS:									
Tryptophan	g	0.162		1	0.046	0.735			
Threonine	g	0.232		1	0.066	1.052			
Isoleucine	g	0.338		1	0.096	1.533			
Leucine	g	0.647		1	0.184	2.935			
Lysine	g	0.260		1	0.074	1.179			
Methionine	g	0.035		1	0.010	0.159			
Cystine	g								
Phenylalanine	g	0.282		1	0.080	1.279			
Tyrosine	g								
Valine	g	0.578		1	0.164	2.622			
Arginine	g	0.549		1	0.156	2.490			
Histidine	g	0.091		1	0.026	0.413			
Alanine	g								
Aspartic acid	g								
Glutamic acid	g								
Glycine	g								
Proline	g								
Serine	g								

¹ 1 oz = approx. 8-14 seeds.

Breadnuttree Seeds, dried

Nutrients and units	Amount in 100 grams, edible portion			Approximate measure and weight 1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples			
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	6.50		1.85		29.48
Food energy	{ kcal	367		104		1,665
	{ kJ	1,536		436		6,968
Protein (N X 5.30)	g	8.62		2.45		39.09
Total lipid (fat)	g	1.68		0.48		7.63
Carbohydrate, total	g	79.39		22.55		360.13
Fiber	g	5.60		1.59		25.41
Ash	g	3.81		1.08		17.26
MINERALS:						
Calcium	mg	94		27		424
Iron	mg	4.60		1.31		20.87
Magnesium	mg					
Phosphorus	mg					
Potassium	mg	178		50		806
Sodium	mg					
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	46.6		13.2		211.2
Thiamin	mg	0.030		0.009		0.136
Riboflavin	mg	0.140		0.040		0.635
Niacin	mg	2.100		0.596		9.526
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE	22		6		98
	{ IU	216		61		982
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.454		0.129		2.059
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	0.301		0.085		1.365
18:0	g	0.154		0.044		0.699
Monounsaturated, total	g	0.214		0.061		0.971
16:1	g	0.009		0.003		0.041
18:1	g	0.205		0.058		0.930
20:1	g					
22:1	g					
Polyunsaturated, total	g	0.896		0.254		4.064
18:2	g	0.690		0.196		3.130
18:3	g	0.207		0.059		0.939
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.234		0.066		1.061
Threonine	g	0.335		0.095		1.520
Isoleucine	g	0.488		0.139		2.214
Leucine	g	0.935		0.266		4.241
Lysine	g	0.376		0.107		1.706
Methionine	g	0.050		0.014		0.227
Cystine	g					
Phenylalanine	g	0.407		0.116		1.846
Tyrosine	g					
Valine	g	0.834		0.237		3.783
Arginine	g	0.793		0.225		3.597
Histidine	g	0.132		0.037		0.599
Alanine	g					
Aspartic acid	g					
Glutamic acid	g					
Glycine	g					
Proline	g					
Serine	g					

Chia Seeds, dried

Salvia spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
	A	B	C	D	E	
PROXIMATE:						
Water	g	5.30	0.806	3	1.51	24.05
Food energy	{ kcal	472			134	2,142
	kJ	1,976			561	8,962
Protein (N X 5.30)	g	16.62	3.392	2	4.72	75.39
Total lipid (fat)	g	26.25	3.550	2	7.46	119.07
Carbohydrate, total	g	47.87			13.60	217.14
Fiber	g	25.30	7.300	2	7.19	114.76
Ash	g	3.96	0.655	2	1.12	17.94
MINERALS:						
Calcium	mg	529	11.000	2	150	2,400
Iron	mg	10.00		1	2.84	45.36
Magnesium	mg					
Phosphorus	mg	604	86.000	2	172	2,740
Potassium	mg					
Sodium	mg					
Zinc	mg	5.32		1	1.51	24.13
Copper	mg	1.660		1	0.471	7.530
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.869	0.489	2	0.247	3.942
Riboflavin	mg	0.166	0.037	2	0.047	0.753
Niacin	mg	5.817	2.077	2	1.652	26.386
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE	4	0.474	2	1	17
	{ IU	36	4.736	2	10	165
LIPIDS:						
Fatty acids:						
Saturated, total	g	10.536			2.992	47.791
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g					
16:0	g	6.876		1	1.953	31.190
18:0	g	3.087		1	0.877	14.003
Monounsaturated, total	g	7.256			2.061	32.913
16:1	g	1.731		1	0.492	7.852
18:1	g	5.320		1	1.511	24.132
20:1	g					
22:1	g					
Polyunsaturated, total	g	7.282			2.068	33.031
18:2	g	3.212		1	0.912	14.570
18:3	g	3.865		1	1.098	17.532
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.235		1	0.067	1.066
Threonine	g	0.746		1	0.212	3.384
Isoleucine	g	0.822		1	0.233	3.729
Leucine	g	1.374		1	0.390	6.232
Lysine	g	0.862		1	0.245	3.910
Methionine	g	0.392		1	0.111	1.778
Cystine	g	0.157		1	0.045	0.712
Phenylalanine	g	0.922		1	0.262	4.182
Tyrosine	g	0.724		1	0.206	3.284
Valline	g	0.960		1	0.273	4.355
Arginine	g	1.628		1	0.462	7.385
Histidine	g	0.489		1	0.139	2.218
Alanine	g	0.922		1	0.262	4.182
Aspartic acid	g	1.762		1	0.500	7.992
Glutamic acid	g	3.371		1	0.957	15.291
Glycine	g	0.978		1	0.278	4.436
Proline	g	0.665		1	0.189	3.016
Serine	g	1.157		1	0.329	5.248

Cottonseed Kernels, roasted¹
Gossypium spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 c = 149 g	
	A	B	C	E	F	G
PROXIMATE:						
Water	g	4.65	1	0.47	6.93	21.09
Food energy	{ kcal	506		51	754	2,295
	{ kJ	2,117		212	3,154	9,601
Protein (N X 5.30)	g	32.59	0.363	2	3.26	147.81
Total lipid (fat)	g	36.29	0.715	2	3.63	164.59
Carbohydrate, total	g	21.90		2.19	32.63	99.33
Fiber	g	2.00		1	0.20	9.07
Ash	g	4.58		1	0.46	20.77
MINERALS:						
Calcium	mg	100		10	149	454
Iron	mg	5.40		0.54	8.05	24.49
Magnesium	mg	440		44	656	1,996
Phosphorus	mg	800		80	1,192	3,629
Potassium	mg	1,350	1	135	2,012	6,124
Sodium	mg	25	1	3	37	113
Zinc	mg	6.00		0.60	8.94	27.22
Copper	mg	1.200		0.120	1.788	5.443
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	9.0		0.9	13.4	40.8
Thiamin	mg	0.750		0.075	1.118	3.402
Riboflavin	mg	0.255		0.026	0.380	1.157
Niacin	mg	3.000		0.300	4.470	13.608
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	9.699		0.970	14.452	43.995
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.341		0.034	0.508	1.547
16:0	g	8.433		0.843	12.565	38.252
18:0	g	0.853		0.085	1.271	3.869
Monounsaturated, total	g	6.919		0.692	10.309	31.385
16:1	g	0.256		0.026	0.381	1.161
18:1	g	6.612		0.661	9.852	29.992
20:1	g					
22:1	g					
Polyunsaturated, total	g	18.068		1.807	26.921	81.956
18:2	g	17.865		1.787	26.619	81.036
18:3	g	0.069		0.007	0.103	0.313
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.492	27	0.049	0.733	2.232
Threonine	g	1.205	41	0.121	1.795	5.466
Isoleucine	g	1.174	37	0.117	1.749	5.325
Leucine	g	2.226	41	0.223	3.317	10.097
Lysine	g	1.654	43	0.165	2.464	7.503
Methionine	g	0.529	37	0.053	0.788	2.400
Cystine	g	0.855	28	0.086	1.274	3.878
Phenylalanine	g	2.029	37	0.203	3.023	9.204
Tyrosine	g	1.174	31	0.117	1.749	5.325
Valine	g	1.672	37	0.167	2.491	7.584
Arginine	g	4.402	37	0.440	6.559	19.967
Histidine	g	1.027	35	0.103	1.530	4.658
Alanine	g	1.512	35	0.151	2.253	6.858
Aspartic acid	g	3.547	35	0.355	5.285	16.089
Glutamic acid	g	8.158	35	0.816	12.155	37.005
Glycine	g	1.580	35	0.158	2.354	7.167
Proline	g	1.389	31	0.139	2.070	6.301
Serine	g	1.629	31	0.163	2.427	7.389

¹ Glandless.

Cottonseed Flour, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: 0	Amount in edible portion of 1 pound of food as purchased		
	Mean	Standard error	Number of samples	Approximate measure and weight					
				1 tbsp = 5 g	1 c = 94 g				
A	B	C	D	E	F	G			
PROXIMATE:									
Water	g	6.30	1	0.32	5.92		28.58		
Food energy	{ kcal	359	18	337		1,629			
Food energy	{ kJ	1,502	75	1,412		6,814			
Protein (N X 5.30)	g	40.96	1	2.05	38.50		185.79		
Total lipid (fat)	g	6.20	1	0.31	5.83		28.12		
Carbohydrate, total	g	40.54		2.03	38.11		183.90		
Fiber	g	2.00	1	0.10	1.88		9.07		
Ash	g	6.00	1	0.30	5.64		27.22		
MINERALS:									
Calcium	mg	478		24	449		2,166		
Iron	mg	12.66		0.63	11.90		57.42		
Magnesium	mg	721		36	677		3,268		
Phosphorus	mg	1,597		80	1,501		7,244		
Potassium	mg	1,772		89	1,666		8,039		
Sodium	mg	35		2	33		159		
Zinc	mg	11.69		0.58	10.98		53.00		
Copper	mg	1.180		0.059	1.109		5.352		
Manganese	mg								
VITAMINS:									
Ascorbic acid	mg								
Thiamin	mg								
Riboflavin	mg								
Niacin	mg								
Pantothenic acid	mg								
Vitamin B ₆	mg								
Folacin	mcg								
Vitamin B ₁₂	mcg								
Vitamin A	{ RE	0		0	0		0		
	{ IU								
LIPIDS:									
Fatty acids:									
Saturated, total	g	1.588		0.079	1.493		7.203		
4:0	g								
6:0	g								
8:0	g								
10:0	g								
12:0	g								
14:0	g	0.056		0.003	0.053		0.254		
16:0	g	1.381		0.069	1.298		6.264		
18:0	g	0.140		0.007	0.132		0.635		
Monounsaturated, total	g	1.133		0.057	1.065		5.139		
16:1	g	0.042		0.002	0.039		0.191		
18:1	g	1.082		0.054	1.017		4.908		
20:1	g								
22:1	g								
Polyunsaturated, total	g	2.958		0.148	2.781		13.417		
18:2	g	2.925		0.146	2.750		13.268		
18:3	g	0.011		0.001	0.010		0.050		
18:4	g								
20:4	g								
20:5	g								
22:5	g								
22:6	g								
Cholesterol	mg	0		0	0		0		
Phytosterols	mg								
AMINO ACIDS:									
Tryptophan	g	0.618		0.031	0.581		2.803		
Threonine	g	1.515		0.076	1.424		6.872		
Isoleucine	g	1.476		0.074	1.387		6.695		
Leucine	g	2.798		0.140	2.630		12.692		
Lysine	g	2.079		0.104	1.954		9.430		
Methionine	g	0.665		0.033	0.625		3.016		
Cystine	g	1.074		0.054	1.010		4.872		
Phenylalanine	g	2.550		0.128	2.397		11.567		
Tyrosine	g	1.476		0.074	1.387		6.695		
Valine	g	2.102		0.105	1.976		9.535		
Arginine	g	5.533		0.277	5.201		25.098		
Histidine	g	1.291		0.065	1.214		5.856		
Alanine	g	1.901		0.096	1.787		8.623		
Aspartic acid	g	4.459		0.223	4.191		20.226		
Glutamic acid	g	10.255		0.513	9.640		46.517		
Glycine	g	1.986		0.099	1.867		9.008		
Proline	g	1.747		0.087	1.642		7.924		
Serine	g	2.048		0.102	1.925		9.290		

¹ Glandless.

Cottonseed Flour, lowfat¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	6.90	0.246	7	1.96	31.29	
Food energy	{ kcal	332		94		1,504	
	{ kJ	1,388		394		6,294	
Protein (N X 5.30)	g	49.83	0.663	6	14.15	226.03	
Total lipid (fat)	g	1.41	0.449	6	0.40	6.40	
Carbohydrate, total	g	36.10			10.25	163.73	
Fiber	g	2.43	0.239	6	0.69	11.01	
Ash	g	5.76	0.735	5	1.64	26.15	
MINERALS:							
Calcium	mg	474	2.372	2	135	2,152	
Iron	mg	12.58	0.423	2	3.57	57.05	
Magnesium	mg	716	24.050	2	203	3,248	
Phosphorus	mg	1,587	53.300	2	451	7,197	
Potassium	mg	1,761	59.150	2	500	7,987	
Sodium	mg	35	1.170	2	10	158	
Zinc	mg	11.61	0.390	2	3.30	52.66	
Copper	mg	1.172			0.333	5.316	
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	2.4	0.080	2	0.7	10.8	
Thiamin	mg	2.089	0.071	2	0.593	9.476	
Riboflavin	mg	0.396	0.013	2	0.112	1.796	
Niacin	mg	4.039		1	1.147	18.321	
Pantothenic acid	mg	0.445	0.015	2	0.126	2.019	
Vitamin B ₆	mg	0.764	0.026	2	0.217	3.466	
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE.	43	1.450	2	12	196	
	{ IU	432	14.495	2	123	1,957	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.310			0.088	1.406	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.011			0.003	0.050	
16:0	g	0.269			0.076	1.220	
18:0	g	0.027			0.008	0.122	
Monounsaturated, total	g	0.221			0.063	1.002	
16:1	g	0.008			0.002	0.036	
18:1	g	0.211			0.060	0.957	
20:1	g						
22:1	g						
Polyunsaturated, total	g	0.577			0.164	2.617	
18:2	g	0.570			0.162	2.586	
18:3	g	0.002			0.001	0.009	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.752			0.214	3.411	
Threonine	g	1.843			0.523	8.360	
Isoleucine	g	1.796			0.510	8.147	
Leucine	g	3.404			0.967	15.441	
Lysine	g	2.529			0.718	11.472	
Methionine	g	0.809			0.230	3.670	
Cystine	g	1.307			0.371	5.929	
Phenylalanine	g	3.103			0.881	14.075	
Tyrosine	g	1.796			0.510	8.147	
Valine	g	2.557			0.726	11.599	
Arginine	g	6.732			1.912	30.536	
Histidine	g	1.570			0.446	7.122	
Alanine	g	2.313			0.657	10.492	
Aspartic acid	g	5.425			1.541	24.608	
Glutamic acid	g	12.476			3.543	56.591	
Glycine	g	2.416			0.686	10.959	
Proline	g	2.125			0.604	9.639	
Serine	g	2.492			0.708	11.304	

¹ Glandless.

SEEDS

Cottonseed Meal, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.20.	1	0.34		5.44	
Food energy	{ kcal	367	104			1,663	
	kJ	1,534	436			6,960	
Protein (N X 5.30)	g	49.10	1	13.94		222.71	
Total lipid (fat)	g	4.77	1	1.35		21.64	
Carbohydrate, total	g	38.43		10.91		174.32	
Fiber	g	2.42		0.69		10.96	
Ash	g	6.50	1	1.85		29.48	
MINERALS:							
Calcium	mg	504	143			2,284	
Iron	mg	13.35	3.79			60.54	
Magnesium	mg	760	216			3,446	
Phosphorus	mg	1,684	478			7,638	
Potassium	mg	1,869	531			8,476	
Sodium	mg	37	10			168	
Zinc	mg	12.32	3.50			55.89	
Copper	mg	1.243	0.353			5.638	
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0	0			0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	1.207	0.343			5.475	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.042	0.012			0.191	
16:0	g	1.049	0.298			4.758	
18:0	g	0.106	0.030			0.481	
Monounsaturated, total	g	0.861	0.245			3.905	
16:1	g	0.032	0.009			0.145	
18:1	g	0.823	0.234			3.733	
20:1	g						
22:1	g						
Polyunsaturated, total	g	2.248	0.638			10.197	
18:2	g	2.223	0.631			10.084	
18:3	g	0.009	0.003			0.041	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0	0			0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.741	0.210			3.361	
Threonine	g	1.816	0.516			8.237	
Isoleucine	g	1.769	0.502			8.024	
Leucine	g	3.354	0.953			15.214	
Lysine	g	2.492	0.708			11.304	
Methionine	g	0.797	0.226			3.615	
Cystine	g	1.288	0.366			5.842	
Phenylalanine	g	3.057	0.868			13.867	
Tyrosine	g	1.769	0.502			8.024	
Valine	g	2.520	0.716			11.431	
Arginine	g	6.633	1.884			30.087	
Histidine	g	1.547	0.439			7.017	
Alanine	g	2.279	0.647			10.338	
Aspartic acid	g	5.345	1.518			24.245	
Glutamic acid	g	12.293	3.491			55.761	
Glycine	g	2.381	0.676			10.800	
Proline	g	2.094	0.595			9.498	
Serine	g	2.455	0.697			11.136	

¹ Glandless.

Lotus Seeds, raw
Nelumbo spp.

Nutrients and units	Amount in 100 grams, edible portion			1 oz = 28.4 g	Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples			
	A	B	C			
PROXIMATE:						
Water	g	77.00		21.87		185.11
Food energy	{ kcal	89		25		214
	kJ	373		106		896
Protein (N X 5.30)	g	4.13		1.17		9.92
Total lipid (fat)	g	0.53		0.15		1.27
Carbohydrate, total	g	17.28		4.91		41.53
Fiber	g	0.65		0.18		1.56
Ash	g	1.07		0.30		2.57
MINERALS:						
Calcium	mg	44		12		105
Iron	mg	0.95		0.27		2.27
Magnesium	mg	56		16		135
Phosphorus	mg	168		48		403
Potassium	mg	367		104		881
Sodium	mg	1		0		3
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	0.0		0.0		0.0
Thiamin	mg	0.171		0.049		0.411
Riboflavin	mg	0.040		0.011		0.096
Niacin	mg	0.429		0.122		1.031
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE	1		0		3
	{ IU	13		4		32
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.088		0.025		0.212
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.001	1	0.000		0.002
16:0	g	0.077	1	0.022		0.185
18:0	g					
Monounsaturated, total	g	0.104		0.030		0.250
16:1	g					
18:1	g	0.062	1	0.018		0.149
20:1	g	0.012	1	0.003		0.029
22:1	g	0.031	1	0.009		0.075
Polyunsaturated, total	g	0.312		0.089		0.750
18:2	g	0.285	1	0.081		0.685
18:3	g	0.027	1	0.008		0.065
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.059	6	0.017		0.142
Threonine	g	0.200	6	0.057		0.481
Isoleucine	g	0.205	6	0.058		0.493
Leucine	g	0.326	6	0.093		0.784
Lysine	g	0.264	6	0.075		0.635
Methionine	g	0.072	6	0.020		0.173
Cystine	g	0.054	6	0.015		0.130
Phenylalanine	g	0.206	6	0.059		0.495
Tyrosine	g	0.100	6	0.028		0.240
Valine	g	0.266	6	0.076		0.639
Arginine	g	0.338	6	0.096		0.813
Histidine	g	0.115	6	0.033		0.276
Alanine	g	0.239	6	0.068		0.575
Aspartic acid	g	0.505	6	0.143		1.214
Glutamic acid	g	0.957	6	0.272		2.301
Glycine	g	0.221	6	0.063		0.531
Proline	g	0.344	6	0.098		0.827
Serine	g	0.252	6	0.072		0.606

Lotus Seeds, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g ¹	1 c = 32 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	14.16	4.140	2	4.02	4.53	64.23
Food energy	{ kcal	332		94	106	1,508	
	kJ	1,391		395	445	6,308	
Protein (N X 5.30)	g	15.41	0.493	2	4.38	4.93	69.89
Total lipid (fat)	g	1.97	0.730	2	0.56	0.63	8.94
Carbohydrate, total	g	64.47		18.31	20.63	292.45	
Fiber	g	2.42	0.320	2	0.69	0.77	10.98
Ash	g	3.99	0.190	2	1.13	1.28	18.10
MINERALS:							
Calcium	mg	163	48.550	2	46	52	737
Iron	mg	3.53	0.070	2	1.00	1.13	16.01
Magnesium	mg	210		1	60	67	953
Phosphorus	mg	626	42.550	2	178	200	2,837
Potassium	mg	1,368		1	389	438	6,207
Sodium	mg	5		1		1	21
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0		1	0.0	0.0	0.0
Thiamin	mg	0.640		1	0.182	0.205	2.903
Riboflavin	mg	0.150		1	0.043	0.048	0.680
Niacin	mg	1.600		1	0.454	0.512	7.258
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	5		1	1	2	23
	{ IU	50		1	14	16	227
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.330			0.094	0.106	1.497
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.004			0.001	0.001	0.018
16:0	g	0.288			0.082	0.092	1.306
18:0	g						
Monounsaturated, total	g	0.388			0.110	0.124	1.760
16:1	g						
18:1	g	0.230			0.065	0.074	1.043
20:1	g	0.043			0.012	0.014	0.195
22:1	g	0.115			0.033	0.037	0.522
Polyunsaturated, total	g	1.166			0.331	0.373	5.289
18:2	g	1.064			0.302	0.340	4.826
18:3	g	0.102			0.029	0.033	0.463
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.221			0.063	0.071	1.002
Threonine	g	0.747			0.212	0.239	3.388
Isoleucine	g	0.765			0.217	0.245	3.470
Leucine	g	1.215			0.345	0.389	5.511
Lysine	g	0.985			0.280	0.315	4.468
Methionine	g	0.267			0.076	0.085	1.211
Cystine	g	0.201			0.057	0.064	0.912
Phenylalanine	g	0.767			0.218	0.245	3.479
Tyrosine	g	0.375			0.107	0.120	1.701
Valine	g	0.991			0.281	0.317	4.495
Arginine	g	1.262			0.358	0.404	5.724
Histidine	g	0.430			0.122	0.138	1.950
Alanine	g	0.892			0.253	0.285	4.046
Aspartic acid	g	1.884			0.535	0.603	8.546
Glutamic acid	g	3.570			1.014	1.142	16.194
Glycine	g	0.826			0.235	0.264	3.747
Proline	g	1.285			0.365	0.411	5.829
Serine	g	0.939			0.267	0.300	4.259

¹ 1 oz = approx. 47 small seeds (7/16 x 3/8 in) or 36 large seeds (1/2 x 7/16 in).

Pumpkin and Squash Seeds, whole, roasted
Cucurbita spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight 1 oz = 28.4 g ¹	1 c = 64 g	Refuse: 0
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	4.50	1	1.28	2.88	20.41
Food energy	{ kcal	446	127	285	2,021	
	{ kJ	1,864	529	1,193	8,455	
Protein (N X 5.30)	g	18.55	1	5.27	11.87	84.14
Total lipid (fat)	g	19.40	1	5.51	12.42	88.00
Carbohydrate, total	g	53.75		15.27	34.40	243.81
Fiber	g	35.90	1	10.20	22.98	162.84
Ash	g	3.80	1	1.08	2.43	17.24
MINERALS:						
Calcium	mg	55	1	16	35	249
Iron	mg	3.31	1	0.94	2.12	15.01
Magnesium	mg	262	1	74	168	1,188
Phosphorus	mg	92	1	26	59	417
Potassium	mg	919	1	261	588	4,169
Sodium ²	mg	18		5	12	82
Zinc	mg	10.30	1	2.93	6.59	46.72
Copper	mg	0.690	1	0.196	0.442	3.130
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg					
Riboflavin	mg					
Niacin	mg					
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	3.670		1.042	2.349	16.647
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g	0.019		0.005	0.012	0.086
14:0	g	0.022		0.006	0.014	0.100
16:0	g	2.374		0.674	1.519	10.768
18:0	g	1.189		0.338	0.761	5.393
Monounsaturated, total	g	6.032		1.713	3.860	27.361
16:1	g	0.042		0.012	0.027	0.191
18:1	g	5.985		1.700	3.830	27.148
20:1	g					
22:1	g					
Polyunsaturated, total	g	8.844		2.512	5.660	40.116
18:2	g	8.759		2.488	5.606	39.731
18:3	g	0.077		0.022	0.049	0.349
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.326	12	0.093	0.209	1.479
Threonine	g	0.683	15	0.194	0.437	3.098
Isoleucine	g	0.956	15	0.272	0.612	4.336
Leucine	g	1.572	15	0.446	1.006	7.131
Lysine	g	1.386	15	0.394	0.887	6.287
Methionine	g	0.417	14	0.118	0.267	1.892
Cystine	g	0.228	3	0.065	0.146	1.034
Phenylalanine	g	0.924	14	0.262	0.591	4.191
Tyrosine	g	0.770	15	0.219	0.493	3.493
Valine	g	1.491	14	0.423	0.954	6.763
Arginine	g	3.049	14	0.866	1.951	13.830
Histidine	g	0.515	14	0.146	0.330	2.336
Alanine	g	0.875	5	0.249	0.560	3.969
Aspartic acid	g	1.873	5	0.532	1.199	8.496
Glutamic acid	g	3.262	5	0.926	2.088	14.796
Glycine	g	1.358	6	0.386	0.869	6.160
Proline	g	0.756	5	0.215	0.484	3.429
Serine	g	0.868	5	0.247	0.556	3.937

¹ 1 oz = approx. 85 seeds.² Value based on data for product without added salt. Product with added salt contains 575 mg sodium per 100 g.

Pumpkin and Squash Seed Kernels, dried

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Hulls 26%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g ¹	1 c = 138 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	6.92	0.391	17	1.97	9.55	
Food energy	kcal	541		154	747	23.23	
Food energy	kJ	2,265		643	3,126	1,817	
Protein (N x 5.30)	g	24.54	0.767	17	6.97	82.36	
Total lipid (fat)	g	45.85	0.877	17	13.02	153.89	
Carbohydrate, total	g	17.81			5.06	59.76	
Fiber	g	2.22	0.251	14	0.63	7.46	
Ash	g	4.88	0.127	15	1.39	16.37	
MINERALS:							
Calcium	mg	43	1.184	13	12	59	
Iron	mg	14.97	1.018	11	4.25	20.66	
Magnesium	mg	535		1	152	738	
Phosphorus	mg	1,174	34.726	12	333	1,620	
Potassium	mg	807		1	229	1,114	
Sodium	mg	18		1	5	24	
Zinc	mg	7.46			2.12	10.29	
Copper	mg	1.387			0.394	1.914	
Manganese	mg					59	
VITAMINS:							
Ascorbic acid	mg					25.02	
Thiamin	mg	0.210	0.020	2	0.060	0.290	
Riboflavin	mg	0.320	0.050	2	0.091	0.442	
Niacin	mg	1.745	0.305	2	0.496	2.408	
Pantothenic acid	mg					5.856	
Vitamin B ₆	mg					0.705	
Folacin	mcg					1.074	
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ IU	38		11	52	128	
Vitamin A	{ IU	380		108	525	1,276	
LIPIDS:							
Fatty acids:							
Saturated, total	g	8.674			2.463	11.970	
4:0	g					29.110	
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.044		1	0.012	0.061	
14:0	g	0.052		5	0.015	0.072	
16:0	g	5.612		12	1.594	7.745	
18:0	g	2.811		12	0.798	3.879	
Monounsaturated, total	g	14.258			4.049	19.676	
16:1	g	0.099		4	0.028	0.137	
18:1	g	14.146		12	4.017	19.521	
20:1	g						
22:1	g						
Polyunsaturated, total	g	20.904			5.937	28.848	
18:2	g	20.702		12	5.879	28.569	
18:3	g	0.181		6	0.051	0.250	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.431			0.122	0.595	
Threonine	g	0.903			0.256	1.246	
Isoleucine	g	1.264			0.359	1.744	
Leucine	g	2.079			0.590	2.869	
Lysine	g	1.833			0.521	2.530	
Methionine	g	0.551			0.156	0.760	
Cystine	g	0.301			0.085	0.415	
Phenylalanine	g	1.222			0.347	1.686	
Tyrosine	g	1.019			0.289	1.406	
Valine	g	1.972			0.560	2.721	
Arginine	g	4.033			1.145	5.566	
Histidine	g	0.681			0.193	0.940	
Alanine	g	1.158			0.329	1.598	
Aspartic acid	g	2.477			0.703	3.418	
Glutamic acid	g	4.315			1.225	5.955	
Glycine	g	1.796			0.510	2.478	
Proline	g	1.000			0.284	1.380	
Serine	g	1.148			0.326	1.584	

¹ 1 oz = approx. 142 kernels.

Pumpkin and Squash Seed Kernels, roasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 227 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	7.10	1	2.02	16.12	32.21	
Food energy	{ kcal	522	148	1,184	2,366		
	{ kJ	2,183	620	4,956	9,901		
Protein (N X 5.30)	g	32.97	1	9.36	74.83	149.53	
Total lipid (fat)	g	42.13	1	11.96	95.64	191.10	
Carbohydrate, total	g	13.43		3.82	30.50	60.94	
Fiber	g	1.81	1	0.51	4.11	8.21	
Ash	g	4.37	1	1.24	9.92	19.82	
MINERALS:							
Calcium	mg	43		12	97	194	
Iron	mg	14.94		4.24	33.92	67.77	
Magnesium	mg	534	152	1,212	2,422		
Phosphorus	mg	1,172	333	2,660	5,315		
Potassium	mg	806	229	1,829	3,655		
Sodium ¹	mg	18		5	40	80	
Zinc	mg	7.44		2.11	16.89	33.75	
Copper	mg	1.384		0.393	3.142	6.278	
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg	0.090		0.026	0.204	0.408	
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	7.970		2.263	18.092	36.152	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g	0.040		0.011	0.091	0.181	
14:0	g	0.048		0.014	0.109	0.218	
16:0	g	5.156		1.464	11.704	23.388	
18:0	g	2.583		0.734	5.863	11.716	
Monounsaturated, total	g	13.100		3.720	29.737	59.422	
16:1	g	0.091		0.026	0.207	0.413	
18:1	g	12.997		3.691	29.503	58.954	
20:1	g						
22:1	g						
Polyunsaturated, total	g	19.206		5.455	43.598	87.118	
18:2	g	19.020		5.402	43.175	86.275	
18:3	g	0.166		0.047	0.377	0.753	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.578		0.164	1.312	2.622	
Threonine	g	1.213		0.344	2.754	5.502	
Isoleucine	g	1.698		0.482	3.854	7.702	
Leucine	g	2.793		0.793	6.340	12.669	
Lysine	g	2.463		0.699	5.591	11.172	
Methionine	g	0.740		0.210	1.680	3.357	
Cystine	g	0.404		0.115	0.917	1.833	
Phenylalanine	g	1.642		0.466	3.727	7.448	
Tyrosine	g	1.368		0.389	3.105	6.205	
Valine	g	2.650		0.753	6.016	12.020	
Arginine	g	5.418		1.539	12.299	24.576	
Histidine	g	0.914		0.260	2.075	4.146	
Alanine	g	1.555		0.442	3.530	7.053	
Aspartic acid	g	3.328		0.945	7.555	15.096	
Glutamic acid	g	5.797		1.646	13.159	26.295	
Glycine	g	2.413		0.685	5.478	10.945	
Proline	g	1.344		0.382	3.051	6.096	
Serine	g	1.543		0.438	3.503	6.999	

¹ Value based on data for product without added salt. Product with added salt contains 575 mg sodium per 100 g.

Safflower Seed Kernels, dried

Carthamus tinctorius

Nutrients and units	Amount in 100 grams, edible portion			1 oz = 28.4 g	Amount in edible portion of common measures of food	Amount in edible portion of 1 pound of food as purchased			
	Mean	Standard error	Number of samples						
A	B	C	D	E	F	G			
PROXIMATE:									
Water	g	5.62	0.145	34	1.60	13.00			
Food energy	{ kcal	517			147	1,197			
	kJ	2,165			615	5,008			
Protein (N X 5.30)	g	16.18	2.268	2	4.59	37.42			
Total lipid (fat)	g	38.45	0.798	34	10.92	88.92			
Carbohydrate, total	g	34.29			9.74	79.31			
Fiber	g	2.48	0.182	2	0.70	5.74			
Ash	g	5.47	2.429	2	1.55	12.65			
MINERALS:									
Calcium	mg	78			22	180			
Iron	mg								
Magnesium	mg								
Phosphorus	mg	644			183	1,489			
Potassium	mg								
Sodium	mg								
Zinc	mg								
Copper	mg								
Manganese	mg								
VITAMINS:									
Ascorbic acid	mg	0.0			0.0	0.0			
Thiamin	mg	1.163			0.330	2.690			
Riboflavin	mg	0.415			0.118	0.960			
Niacin	mg	2.284			0.649	5.283			
Pantothenic acid	mg								
Vitamin B ₆	mg								
Folacin	mcg								
Vitamin B ₁₂	mcg	0			0	0			
Vitamin A	{ RE								
	IU								
LIPIDS:									
Fatty acids:									
Saturated, total	g	3.682			1.046	8.516			
4:0	g								
6:0	g								
8:0	g								
10:0	g								
12:0	g								
14:0	g	0.035		41	0.010	0.081			
16:0	g	2.574		44	0.731	5.954			
18:0	g	0.921		44	0.262	2.130			
Monounsaturated, total	g	4.848			1.377	11.213			
16:1	g	0.037		32	0.011	0.086			
18:1	g	4.806		44	1.365	11.116			
20:1	g								
22:1	g								
Polysaturated, total	g	28.223			8.015	65.280			
18:2	g	28.084		44	7.976	64.958			
18:3	g	0.111		32	0.032	0.257			
18:4	g								
20:4	g								
20:5	g								
22:5	g								
22:6	g								
Cholesterol	mg	0			0	0			
Phytosterols	mg								
AMINO ACIDS:									
Tryptophan	g	0.183		4	0.052	0.423			
Threonine	g	0.586		9	0.166	1.355			
Isoleucine	g	0.717		9	0.204	1.658			
Leucine	g	1.154		9	0.328	2.669			
Lysine	g	0.534		55	0.152	1.235			
Methionine	g	0.284		7	0.081	0.657			
Cystine	g	0.311		7	0.088	0.719			
Phenylalanine	g	0.806		8	0.229	1.864			
Tyrosine	g	0.531		8	0.151	1.228			
Valine	g	1.025		9	0.291	2.371			
Arginine	g	1.749		8	0.497	4.045			
Histidine	g	0.452		8	0.128	1.045			
Alanine	g	0.772		8	0.219	1.786			
Aspartic acid	g	1.807		8	0.513	4.180			
Glutamic acid	g	3.699		8	1.051	8.556			
Glycine	g	1.010		8	0.287	2.336			
Proline	g	0.726		8	0.206	1.679			
Serine	g	0.812		8	0.231	1.878			

Safflower Seed Meal, partially defatted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight		
	A	B	C	D	E	F	G
PROXIMATE:				1 oz = 28.4 g		
Water	g	6.41	1	1.82		29.08
Food energy	{ kcal	342		97		1,551
	{ kJ	1,431		406		6,490
Protein (N X 5.30)	g	35.62	1	10.11		161.55
Total lipid (fat)	g	2.39	1	0.68		10.84
Carbohydrate, total	g	48.73		13.84		221.06
Fiber	g	7.62		2.16		34.56
Ash	g	6.85	1	1.95		31.07
MINERALS:						
Calcium	mg	77		22		350
Iron	mg					
Magnesium	mg					
Phosphorus	mg	638		181		2,896
Potassium	mg					
Sodium	mg					
Zinc	mg					
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg	0.0		0.0		0.0
Thiamin	mg	1.153		0.327		5.230
Riboflavin	mg	0.412		0.117		1.869
Niacin	mg	2.265		0.643		10.274
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0		0
Vitamin A	{ RE					
	{ IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	0.207		0.059		0.939
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.002		0.001		0.009
16:0	g	0.144		0.041		0.653
18:0	g	0.052		0.015		0.236
Monounsaturated, total	g	0.272		0.077		1.234
16:1	g	0.002		0.001		0.009
18:1	g	0.270		0.077		1.225
20:1	g					
22:1	g					
Polyunsaturated, total	g	1.584		0.450		7.185
18:2	g	1.576		0.448		7.149
18:3	g	0.006		0.002		0.027
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0		0
Phyosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.403		0.114		1.828
Threonine	g	1.290		0.366		5.851
Isoleucine	g	1.579		0.448		7.162
Leucine	g	2.540		0.721		11.521
Lysine	g	1.176		0.334		5.334
Methionine	g	0.625		0.178		2.835
Cystine	g	0.685		0.195		3.107
Phenylalanine	g	1.774		0.504		8.047
Tyrosine	g	1.169		0.332		5.303
Valine	g	2.258		0.641		10.242
Arginine	g	3.851		1.094		17.468
Histidine	g	0.995		0.283		4.513
Alanine	g	1.700		0.483		7.711
Aspartic acid	g	3.978		1.130		18.044
Glutamic acid	g	8.145		2.313		36.946
Glycine	g	2.224		0.632		10.088
Proline	g	1.599		0.454		7.253
Serine	g	1.788		0.508		8.110

Sesame Seeds, whole, dried
Sesamum indicum

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 tbsp = 9 g	1 c = 144 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	4.69	0.180	65	0.42	6.75	21.27
Food energy	{ kcal	573			52	825	2,598
	kJ	2,396			216	3,451	10,870
Protein (N X 5.30)	g	17.73	0.256	61	1.60	25.54	80.44
Total lipid (fat)	g	49.67	0.501	58	4.47	71.53	225.32
Carbohydrate, total	g	23.45			2.11	33.77	106.36
Fiber	g	4.60	0.601	25	0.41	6.62	20.86
Ash	g	4.45	0.152	59	0.40	6.41	20.20
MINERALS:							
Calcium ¹	mg	975	102.528	21	88	1,404	4,421
Iron	mg	14.55	1.587	16	1.31	20.95	65.99
Magnesium	mg	351	23.961	3	32	505	1,591
Phosphorus	mg	629	23.830	20	57	906	2,854
Potassium	mg	468	34.612	4	42	674	2,124
Sodium	mg	11	6.384	3	1	16	51
Zinc	mg	7.75	0.536	4	0.70	11.16	35.14
Copper	mg	4.082	1.277	4	0.367	5.878	18.516
Manganese ²	mg	2.460	0.723	3	0.221	3.542	11.159
VITAMINS:							
Ascorbic acid	mg	0.0		4	0.0	0.0	0.0
Thiamin	mg	0.791	0.084	8	0.071	1.139	3.588
Riboflavin	mg	0.247	0.034	10	0.022	0.356	1.120
Niacin	mg	4.515	0.227	10	0.406	6.502	20.480
Pantothenic acid	mg	0.050		1	0.005	0.072	0.227
Vitamin B ₆	mg	0.790		1	0.071	1.138	3.583
Folacin	mcg	96.7			8.7	139.3	438.7
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE	1	0.609	8	0	1	4
	IU	9	6.094	8	1	13	42
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.957			0.626	10.018	31.557
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.124		1	0.011	0.179	0.562
16:0	g	4.441		761	0.400	6.395	20.144
18:0	g	2.090		761	0.188	3.010	9.480
Monounsaturated, total	g	18.759			1.688	27.013	85.091
16:1	g	0.149		17	0.013	0.215	0.676
18:1	g	18.521		761	1.667	26.670	84.011
20:1	g	0.070		9	0.006	0.101	0.318
22:1	g						
Polyunsaturated, total	g	21.773			1.960	31.353	98.762
18:2	g	21.375		761	1.924	30.780	96.957
18:3	g	0.376		25	0.034	0.541	1.706
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg	714			64	1,028	3,239
AMINO ACIDS:							
Tryptophan	g	0.388		13	0.035	0.559	1.760
Threonine	g	0.736		19	0.066	1.060	3.338
Isoleucine	g	0.763		19	0.069	1.099	3.461
Leucine	g	1.358		19	0.122	1.956	6.160
Lysine	g	0.569		19	0.051	0.819	2.581
Methionine	g	0.586		19	0.053	0.844	2.658
Cystine	g	0.358		10	0.032	0.516	1.624
Phenylalanine	g	0.940		19	0.085	1.354	4.264
Tyrosine	g	0.743		14	0.067	1.070	3.370
Valine	g	0.990		19	0.089	1.426	4.491
Arginine	g	2.630		18	0.237	3.787	11.930
Histidine	g	0.522		18	0.047	0.752	2.368
Alanine	g	0.927		13	0.083	1.335	4.205
Aspartic acid	g	1.646		13	0.148	2.370	7.466
Glutamic acid	g	3.955		13	0.356	5.695	17.940
Glycine	g	1.215		13	0.109	1.750	5.511
Proline	g	0.810		13	0.073	1.166	3.674
Serine	g	0.967		13	0.087	1.392	4.386

¹ Calcium in hull present as oxalate.² Alpha-tocopherol = 2.27 mg per 100 g.

Sesame Seeds, whole, roasted and toasted

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g			
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.30	1.700	2	0.94	14.97	
Food energy	{ kcal	565		161		2,565	
	{ kJ	2,366		672		10,730	
Protein (N X 5.30)	g	16.96		1	4.82	76.93	
Total lipid (fat)	g	48.00		1	13.63	217.73	
Carbohydrate, total	g	29.74			7.31	116.76	
Fiber	g	8.50		1	2.41	38.56	
Ash	g	6.00		1	1.70	27.22	
MINERALS:							
Calcium ¹	mg	989			281	4,486	
Iron	mg	14.76			4.19	66.96	
Magnesium	mg	356			101	1,614	
Phosphorus	mg	638			181	2,895	
Potassium	mg	475			135	2,155	
Sodium	mg	11			3	52	
Zinc	mg	7.16		1	2.03	32.48	
Copper	mg	2.470		1	0.701	11.204	
Manganese	mg	2.496			0.709	11.322	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.722			1.909	30.491	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.120			0.034	0.544	
16:0	g	4.292			1.219	19.469	
18:0	g	2.019			0.573	9.158	
Monounsaturated, total	g	18.127			5.148	82.224	
16:1	g	0.144			0.041	0.653	
18:1	g	17.897			5.083	81.181	
20:1	g	0.067			0.019	0.304	
22:1	g						
Polysaturated, total	g	21.039			5.975	95.433	
18:2	g	20.654			5.866	93.687	
18:3	g	0.363			0.103	1.647	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.371			0.105	1.683	
Threonine	g	0.704			0.200	3.193	
Isoleucine	g	0.730			0.207	3.311	
Leucine	g	1.299			0.369	5.892	
Lysine	g	0.544			0.154	2.468	
Methionine	g	0.560			0.159	2.540	
Cystine	g	0.342			0.097	1.551	
Phenylalanine	g	0.899			0.255	4.078	
Tyrosine	g	0.710			0.202	3.221	
Valine	g	0.947			0.269	4.296	
Arginine	g	2.515			0.714	11.408	
Histidine	g	0.499			0.142	2.263	
Alanine	g	0.886			0.252	4.019	
Aspartic acid	g	1.574			0.447	7.140	
Glutamic acid	g	3.782			1.074	17.155	
Glycine	g	1.162			0.330	5.271	
Proline	g	0.774			0.220	3.511	
Serine	g	0.925			0.263	4.196	

¹ Calcium in hull present as oxalate.

Sesame Seed Kernels, dried¹ 2

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight	Refuse: 0	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	4.81	0.272	29	0.38 47	7.22 882
Food energy	{ kcal	588			197	2,668 3,693
Protein (N X 5.30)	g	2,462				11,167
Total lipid (fat)	g	26.38	0.100	613	2.11	39.57
Carbohydrate, total	g	54.78	0.108	614	4.38	82.16
Fiber	g	9.39			0.75	14.09
Ash	g	2.96	0.250	20	0.24	4.44
		4.64	0.413	26	0.37	6.96
MINERALS:						
Calcium	mg	131	50.769	19	10	197
Iron	mg	7.80	0.783	6	0.62	11.70
Magnesium	mg	347	41.767	3	28	520
Phosphorus	mg	776	71.400	9	62	1,163
Potassium	mg	407	58.119	3	33	610
Sodium	mg	40	8.005	4	3	59
Zinc	mg	10.25	0.750	2	0.82	15.38
Copper	mg					595
Manganese	mg					35.37
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	0.722	0.246	5	0.058	1.083
Riboflavin	mg	0.085	0.022	16	0.007	0.128
Niacin	mg	4.682	0.152	15	0.375	7.023
Pantothenic acid	mg	0.681	0.104	2	0.054	1.022
Vitamin B ₆	mg					21.238
Folacin	mcg					3.089
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE	7		1	1	10
	{ IU	66		1	5	99
LIPIDS:						
Fatty acids:						
Saturated, total	g	7.672			0.614	11.508
4:0	g					34.800
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.136			0.011	0.204
16:0	g	4.898			0.392	7.347
18:0	g	2.305			0.184	3.458
Monounsaturated, total	g	20.687			1.655	31.030
16:1	g	0.164			0.013	0.246
18:1	g	20.425			1.634	30.638
20:1	g	0.077			0.006	0.116
22:1	g					0.349
Polyunsaturated, total	g	24.011			1.921	36.016
18:2	g	23.572			1.886	35.358
18:3	g	0.415			0.033	0.622
18:4	g					108.914
20:4	g					106.923
20:5	g					1.882
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.473			0.038	0.710
Threonine	g	1.180			0.094	1.770
Isoleucine	g	1.289			0.103	1.934
Leucine	g	2.150			0.172	3.225
Lysine	g	0.831			0.066	1.247
Methionine	g	0.896			0.072	1.344
Cystine	g	0.523			0.042	0.785
Phenylalanine	g	1.528			0.122	2.292
Tyrosine	g	1.125			0.090	1.688
Valine	g	1.478			0.118	2.217
Arginine	g	3.325			0.266	4.988
Histidine	g	0.677			0.054	1.016
Alanine	g	1.409			0.113	2.114
Aspartic acid	g	2.265			0.181	3.398
Glutamic acid	g	4.943			0.395	7.415
Glycine	g	1.896			0.152	2.844
Proline	g	1.359			0.109	2.039
Serine	g	1.309			0.105	1.964
						5.938

¹ Decorticated.² Proximate, mineral, vitamin, and amino acid values from U.S. Dept. Agr. Composition of Foods: Spices and Herbs; Raw, Processed, Prepared. Principal investigators: A.C. Marsh, M.K. Moss, and E.W. Murphy. Agr. Handb. No. 8-2, 51 pp., Rev. 1977.

Sesame Seed Kernels, toasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food Approximate measure and weight	Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples		Refuse: 0	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	5.00	3	1.42	22.68	
Food energy	{ kcal	567		161	2,570	
	kJ	2,371		673	10,753	
Protein (N X 5.30)	g	16.96	3	4.82	76.93	
Total lipid (fat)	g	48.00	3	13.63	217.73	
Carbohydrate, total	g	26.04		7.40	118.12	
Fiber	g	5.00	3	1.42	22.68	
Ash	g	4.00	3	1.14	18.14	
MINERALS:						
Calcium	mg	131		37	593	
Iron	mg	7.78		2.21	35.31	
Magnesium	mg	346		98	1,571	
Phosphorus	mg	774		220	3,513	
Potassium	mg	406		115	1,842	
Sodium	mg	39		11	179	
Zinc	mg	10.23		2.90	46.39	
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	1.205		0.342	5.466	
Riboflavin	mg	0.466		0.132	2.114	
Niacin	mg	5.438		1.544	24.667	
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	6.722		1.909	30.491	
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.120		0.034	0.544	
16:0	g	4.292		1.219	19.469	
18:0	g	2.019		0.573	9.158	
Monounsaturated, total	g	18.127		5.148	82.224	
16:1	g	0.144		0.041	0.653	
18:1	g	17.897		5.083	81.181	
20:1	g	0.067		0.019	0.304	
22:1	g					
Polyunsaturated, total	g	21.039		5.975	95.433	
18:2	g	20.654		5.866	93.687	
18:3	g	0.363		0.103	1.647	
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.371		0.105	1.683	
Threonine	g	0.704		0.200	3.193	
Isoleucine	g	0.730		0.207	3.311	
Leucine	g	1.299		0.369	5.892	
Lysine	g	0.544		0.154	2.468	
Methionine	g	0.560		0.159	2.540	
Cystine	g	0.342		0.097	1.551	
Phenylalanine	g	0.899		0.255	4.078	
Tyrosine	g	0.710		0.202	3.221	
Valine	g	0.947		0.269	4.296	
Arginine	g	2.515		0.714	11.408	
Histidine	g	0.499		0.142	2.263	
Alanine	g	0.886		0.252	4.019	
Aspartic acid	g	1.574		0.447	7.140	
Glutamic acid	g	3.782		1.074	17.155	
Glycine	g	1.162		0.330	5.271	
Proline	g	0.774		0.220	3.511	
Serine	g	0.925		0.263	4.196	

¹ Decorticated.

Sesame Butter, Paste¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0
				1 oz = 28.4 g	1 tbsp = 16 g	G
A	B	C	D	E	F	
PROXIMATE:						
Water	g	1.60	1.400	2	0.45	0.26
Food energy	{ kcal kJ	595 2,489		169 707	95 398	7.26 2,699 11,292
Protein (N X 5.30)	g	18.08	1.121	2	5.14	2.89
Total lipid (fat)	g	50.87	1.737	3	14.45	8.14
Carbohydrate, total	g	25.45			7.23	4.07
Fiber	g	5.45	0.550	2	1.55	0.87
Ash	g	5.40	0.600	2	1.53	0.86
MINERALS:						
Calcium ²	mg	960		273	154	4,355
Iron	mg	19.20		5.45	3.07	87.09
Magnesium	mg	362		103	58	1,642
Phosphorus	mg	659		187	105	2,988
Potassium	mg	582		165	93	2,640
Sodium	mg	12		3	2	53
Zinc	mg	7.29		2.07	1.17	33.07
Copper	mg	4.214		1.197	0.674	19.115
Manganese	mg	2.540		0.721	0.406	11.521
VITAMINS:						
Ascorbic acid	mg	0.0		0.0	0.0	0.0
Thiamin	mg	0.240		0.068	0.038	1.089
Riboflavin	mg	0.200		0.057	0.032	0.907
Niacin	mg	6.700		1.903	1.072	30.391
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg					
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE IU	5 50		1 14	1 8	23 227
LIPIDS:						
Fatty acids:						
Saturated, total	g	7.124		2.023	1.140	32.314
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.127		0.036	0.020	0.576
16:0	g	4.548		1.292	0.728	20.630
18:0	g	2.140		0.608	0.342	9.707
Monounsaturated, total	g	19.209		5.455	3.073	87.132
16:1	g	0.153		0.043	0.024	0.694
18:1	g	18.966		5.386	3.035	86.030
20:1	g	0.071		0.020	0.011	0.322
22:1	g					
Polyunsaturated, total	g	22.296		6.332	3.567	101.135
18:2	g	21.888		6.216	3.502	99.284
18:3	g	0.385		0.109	0.062	1.746
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.396		0.112	0.063	1.796
Threonine	g	0.751		0.213	0.120	3.407
Isoleucine	g	0.778		0.221	0.124	3.529
Leucine	g	1.385		0.393	0.222	6.282
Lysine	g	0.580		0.165	0.093	2.631
Methionine	g	0.597		0.170	0.096	2.708
Cystine	g	0.365		0.104	0.058	1.656
Phenylalanine	g	0.959		0.272	0.153	4.350
Tyrosine	g	0.757		0.215	0.121	3.434
Valine	g	1.010		0.287	0.162	4.581
Arginine	g	2.682		0.762	0.429	12.166
Histidine	g	0.532		0.151	0.085	2.413
Alanine	g	0.945		0.268	0.151	4.287
Aspartic acid	g	1.679		0.477	0.269	7.616
Glutamic acid	g	4.033		1.145	0.645	18.294
Glycine	g	1.239		0.352	0.198	5.620
Proline	g	0.826		0.235	0.132	3.747
Serine	g	0.986		0.280	0.158	4.472

¹ Product made from whole sesame seed.² Calcium in hull present as oxalate.

Sesame Butter, Tahini, from raw and stone ground kernels

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 tbsp = 15 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.00	1	0.85	0.45	13.61	
Food energy	{ kcal	570	162	86	2,586		
	kJ	2,386	677	358	10,821		
Protein (N X 5.30)	g	17.81	1	5.06	2.67	80.78	
Total lipid (fat)	g	48.00	1	13.63	7.20	217.73	
Carbohydrate, total	g	26.19		7.44	3.93	118.81	
Fiber	g	5.00	1	1.42	0.75	22.68	
Ash	g	5.00	1	1.42	0.75	22.68	
MINERALS:							
Calcium	mg	420	119	63	1,907		
Iron	mg	2.51	0.71	0.38	11.39		
Magnesium	mg	96	27	14	434		
Phosphorus	mg	752	214	113	3,413		
Potassium	mg	414	118	62	1,880		
Sodium	mg	74	21	11	334		
Zinc	mg	4.64	1.32	0.70	21.06		
Copper	mg	1.618	0.460	0.243	7.339		
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0	0.0	0.0	0.0		
Thiamin	mg	1.283	0.364	0.192	5.820		
Riboflavin	mg	0.510	0.145	0.077	2.313		
Niacin	mg	5.925	1.683	0.889	26.876		
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0	0	0	0		
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.722	1.909	1.008	30.491		
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.120	0.034	0.018	0.544		
16:0	g	4.292	1.219	0.644	19.469		
18:0	g	2.019	0.573	0.303	9.158		
Monounsaturated, total	g	18.127	5.148	2.719	82.224		
16:1	g	0.144	0.041	0.022	0.653		
18:1	g	17.897	5.083	2.685	81.181		
20:1	g	0.067	0.019	0.010	0.304		
22:1	g						
Polyunsaturated, total	g	21.039	5.975	3.155	95.433		
18:2	g	20.654	5.866	3.098	93.687		
18:3	g	0.363	0.103	0.054	1.647		
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0	0	0	0		
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.390	0.111	0.059	1.796		
Threonine	g	0.739	0.210	0.111	3.352		
Isoleucine	g	0.766	0.218	0.115	3.475		
Leucine	g	1.364	0.387	0.205	6.187		
Lysine	g	0.571	0.162	0.086	2.590		
Methionine	g	0.588	0.167	0.088	2.667		
Cystine	g	0.360	0.102	0.054	1.633		
Phenylalanine	g	0.944	0.268	0.142	4.282		
Tyrosine	g	0.746	0.212	0.112	3.384		
Valine	g	0.995	0.283	0.149	4.513		
Arginine	g	2.641	0.750	0.396	11.980		
Histidine	g	0.524	0.149	0.079	2.377		
Alanine	g	0.931	0.264	0.140	4.223		
Aspartic acid	g	1.653	0.469	0.248	7.498		
Glutamic acid	g	3.972	1.128	0.596	18.017		
Glycine	g	1.220	0.346	0.183	5.534		
Proline	g	0.813	0.231	0.122	3.687		
Serine	g	0.971	0.276	0.146	4.404		

Sesame Butter, Tahini, from unroasted kernels¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 tbsp = 14 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.00		0.85	0.42	13.61	
Food energy	{ kcal	607		173	85	2,755	
	kJ	2,542		722	356	11,529	
Protein (N X 5.30)	g	17.95	1	5.10	2.51	81.40	
Total lipid (fat)	g	56.44	1	16.03	7.90	256.00	
Carbohydrate, total	g	17.89		5.08	2.50	81.15	
Fiber	g	3.02		0.86	0.42	13.68	
Ash	g	4.73		1.34	0.66	21.45	
MINERALS:							
Calcium	mg	141	1	40	20	640	
Iron	mg	6.35	1	1.80	0.89	28.80	
Magnesium	mg	353		100	49	1,602	
Phosphorus	mg	790		224	111	3,585	
Potassium	mg	459	1	130	64	2,080	
Sodium	mg	1	1	0	0	5	
Zinc	mg	10.45		2.97	1.46	47.38	
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	1.587	1	0.451	0.222	7.199	
Riboflavin	mg	0.120	1	0.034	0.017	0.544	
Niacin	mg	5.644	1	1.603	0.790	25.601	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	7.904		2.245	1.107	35.853	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.141		0.040	0.020	0.640	
16:0	g	5.046		1.433	0.706	22.889	
18:0	g	2.374		0.674	0.332	10.768	
Monounsaturated, total	g	21.313		6.053	2.984	96.676	
16:1	g	0.169		0.048	0.024	0.767	
18:1	g	21.043		5.976	2.946	95.451	
20:1	g	0.079		0.022	0.011	0.358	
22:1	g						
Polyunsaturated, total	g	24.737		7.025	3.463	112.207	
18:2	g	24.285		6.897	3.400	110.157	
18:3	g	0.427		0.121	0.060	1.937	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.393		0.112	0.055	1.783	
Threonine	g	0.745		0.212	0.104	3.379	
Isoleucine	g	0.772		0.219	0.108	3.502	
Leucine	g	1.375		0.391	0.193	6.237	
Lysine	g	0.576		0.164	0.081	2.613	
Methionine	g	0.593		0.168	0.083	2.690	
Cystine	g	0.362		0.103	0.051	1.642	
Phenylalanine	g	0.951		0.270	0.133	4.314	
Tyrosine	g	0.752		0.214	0.105	3.411	
Valine	g	1.002		0.285	0.140	4.545	
Arginine	g	2.661		0.756	0.373	12.070	
Histidine	g	0.528		0.150	0.074	2.395	
Alanine	g	0.938		0.266	0.131	4.255	
Aspartic acid	g	1.666		0.473	0.233	7.557	
Glutamic acid	g	4.002		1.137	0.560	18.153	
Glycine	g	1.229		0.349	0.172	5.575	
Proline	g	0.819		0.233	0.115	3.715	
Serine	g	0.979		0.278	0.137	4.441	

¹ Non-chemical removal of seed coat.

Sesame Butter, Tahini, from roasted and toasted kernels

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	3.05	0.050	2	0.87	0.46	13.83
Food energy	{ kcal kJ	595 2,490		169 707	89 374	2,700 11,296	
Protein (N X 5.30)	g	17.00	0.805	2	4.83	2.55	77.12
Total lipid (fat)	g	53.76	5.760	2	15.27	8.06	243.86
Carbohydrate, total	g	21.19			6.02	3.18	96.11
Fiber	g	5.00		1	1.42	0.75	22.68
Ash	g	5.00		1	1.42	0.75	22.68
MINERALS:							
Calcium	mg	426		121	64	1,933	
Iron	mg	8.95		2.54	1.34	40.62	
Magnesium	mg	95		1	27	432	
Phosphorus	mg	732		208	110	3,322	
Potassium	mg	414		118	62	1,880	
Sodium	mg	115	45.240	2	33	17	521
Zinc	mg	4.62		1	1.31	0.69	20.96
Copper	mg	1.610		1	0.457	0.242	7.303
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0		0.0	0.0	0.0	
Thiamin	mg	1.220		0.346	0.183	5.534	
Riboflavin	mg	0.473		0.134	0.071	2.145	
Niacin	mg	5.450		1.548	0.818	24.721	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE. IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	7.529		2.138	1.129	34.152	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.134		0.038	0.020	0.608	
16:0	g	4.807		1.365	0.721	21.805	
18:0	g	2.262		0.642	0.339	10.260	
Monounsaturated, total	g	20.302		5.766	3.045	92.090	
16:1	g	0.161		0.046	0.024	0.730	
18:1	g	20.045		5.693	3.007	90.924	
20:1	g	0.075		0.021	0.011	0.340	
22:1	g						
Polyunsaturated, total	g	23.564		6.692	3.535	106.886	
18:2	g	23.133		6.570	3.470	104.931	
18:3	g	0.407		0.116	0.061	1.846	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.372		0.106	0.056	1.687	
Threonine	g	0.706		0.201	0.106	3.202	
Isoleucine	g	0.731		0.208	0.110	3.316	
Leucine	g	1.302		0.370	0.195	5.906	
Lysine	g	0.545		0.155	0.082	2.472	
Methionine	g	0.561		0.159	0.084	2.545	
Cystine	g	0.343		0.097	0.051	1.556	
Phenylalanine	g	0.901		0.256	0.135	4.087	
Tyrosine	g	0.712		0.202	0.107	3.230	
Valine	g	0.950		0.270	0.143	4.309	
Arginine	g	2.521		0.716	0.378	11.435	
Histidine	g	0.500		0.142	0.075	2.268	
Alanine	g	0.889		0.252	0.133	4.033	
Aspartic acid	g	1.578		0.448	0.237	7.158	
Glutamic acid	g	3.792		1.077	0.569	17.201	
Glycine	g	1.165		0.331	0.175	5.284	
Proline	g	0.776		0.220	0.116	3.520	
Serine	g	0.927		0.263	0.139	4.205	

Sesame Flour, high-fat¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	0.90	1	0.26		4.08	
Food energy	{ kcal	526		149		2,384	
	{ kJ	2,199		625		9,977	
Protein (N X 5.30)	g	30.78	1	8.74		139.63	
Total lipid (fat)	g	37.10	1	10.54		168.29	
Carbohydrate, total	g	26.62		7.56		120.74	
Fiber	g	6.39		1.81		28.98	
Ash	g	4.60	1	1.31		20.87	
MINERALS:							
Calcium	mg	159		45		722	
Iron	mg	15.17		4.31		68.82	
Magnesium	mg	361	102			1,637	
Phosphorus	mg	807	229			3,662	
Potassium	mg	423		120		1,920	
Sodium	mg	41		12		187	
Zinc	mg	10.67		3.03		48.40	
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	2.684		0.762		12.175	
Riboflavin	mg	0.286		0.081		1.297	
Niacin	mg	13.369		3.797		60.642	
Pantothenic acid	mg	2.928		0.832		13.281	
Vitamin B ₆	mg	0.152		0.043		0.689	
Folacin	mcg	30.8		8.7		139.6	
Vitamin B ₁₂	mcg	0		0		0	
Vitamin A	{ RE	7		2		31	
	{ IU	69		20		312	
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.196		1.476		23.569	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.092		0.026		0.417	
16:0	g	3.317		0.942		15.046	
18:0	g	1.561		0.443		7.081	
Monounsaturated, total	g	14.010		3.979		63.549	
16:1	g	0.111		0.032		0.503	
18:1	g	13.833		3.929		62.746	
20:1	g	0.052		0.015		0.236	
22:1	g						
Polyunsaturated, total	g	16.261		4.618		73.760	
18:2	g	15.964		4.534		72.413	
18:3	g	0.281		0.080		1.275	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0		0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.674		0.191		3.057	
Threonine	g	1.278		0.363		5.797	
Isoleucine	g	1.324		0.376		6.006	
Leucine	g	2.358		0.670		10.696	
Lysine	g	0.987		0.280		4.477	
Methionine	g	1.016		0.289		4.609	
Cystine	g	0.621		0.176		2.817	
Phenylalanine	g	1.632		0.463		7.403	
Tyrosine	g	1.289		0.366		5.847	
Valine	g	1.719		0.488		7.797	
Arginine	g	4.565		1.296		20.707	
Histidine	g	0.906		0.257		4.110	
Alanine	g	1.609		0.457		7.298	
Aspartic acid	g	2.858		0.812		12.964	
Glutamic acid	g	6.865		1.950		31.140	
Glycine	g	2.108		0.599		9.562	
Proline	g	1.406		0.399		6.378	
Serine	g	1.679		0.477		7.616	

¹ Product made from sesame seed kernels.

Sesame Flour, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
A	B	C	D	E	F	G
PROXIMATE:						
Water	g	6.61	0.784	5	1.88	29.98
Food energy	{ kcal	382			109	1,735
	kJ	1,600			454	7,257
Protein (N X 5.30)	g	40.32	3.275	5	11.45	182.87
Total lipid (fat)	g	11.89	1.731	5	3.38	53.93
Carbohydrate, total	g	35.14			9.98	159.37
Fiber	g	6.02	1.529	5	1.71	27.31
Ash	g	6.05	0.554	5	1.72	27.45
MINERALS:						
Calcium	mg	150	6.279	6	43	680
Iron	mg	14.30	0.318	6	4.06	64.86
Magnesium	mg	362			103	1,642
Phosphorus	mg	810			230	3,673
Potassium	mg	425			121	1,926
Sodium	mg	41			12	187
Zinc	mg	10.70			3.04	48.54
Copper	mg					
Manganese	mg					
VITAMINS:						
Ascorbic acid	mg					
Thiamin	mg	2,530	0.024	6	0.719	11.476
Riboflavin	mg	0.270	0.008	6	0.077	1.225
Niacin	mg	12,600	0.482	6	3.578	57.154
Pantothenic acid	mg	2,760	0.016	6	0.784	12.519
Vitamin B ₆	mg	0.152			0.043	0.689
Folacin	mcg	29.0	0.318	6	8.2	131.5
Vitamin B ₁₂	mcg	0			0	0
Vitamin A	{ RE	7			2	31
	IU	69			20	313
LIPIDS:						
Fatty acids:						
Saturated, total	g	1.634			0.464	7.412
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.029			0.008	0.132
16:0	g	1.043			0.296	4.731
18:0	g	0.491			0.139	2.227
Monounsaturated, total	g	4.405			1.251	19.981
16:1	g	0.035			0.010	0.159
18:1	g	4.349			1.235	19.727
20:1	g	0.016			0.005	0.073
22:1	g					
Polyunsaturated, total	g	5.113			1.452	23.193
18:2	g	5.019			1.425	22.766
18:3	g	0.088			0.025	0.399
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0			0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.882			0.250	4.001
Threonine	g	1.674			0.475	7.593
Isoleucine	g	1.734			0.492	7.865
Leucine	g	3.088			0.877	14.007
Lysine	g	1.293			0.367	5.865
Methionine	g	1.331			0.378	6.037
Cystine	g	0.814			0.231	3.692
Phenylalanine	g	2.138			0.607	9.698
Tyrosine	g	1.689			0.480	7.661
Valine	g	2.252			0.640	10.215
Arginine	g	5.979			1.698	27.121
Histidine	g	1.187			0.337	5.384
Alanine	g	2.107			0.598	9.557
Aspartic acid	g	3.743			1.063	16.978
Glutamic acid	g	8.991			2.553	40.783
Glycine	g	2.761			0.784	12.524
Proline	g	1.841			0.523	8.351
Serine	g	2.198			0.624	9.970

¹ Product made from sesame seed kernels.

Sesame Flour, lowfat¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	F		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	7.10	0.900	2	2.02	32.21	
Food energy	{ kcal	333			95	1,511	
	{ kJ	1,394			396	6,323	
Protein (N X 5.30)	g	50.14	0.740	2	14.24	227.44	
Total lipid (fat)	g	1.75	0.250	2	0.50	7.94	
Carbohydrate, total	g	35.51			10.08	161.07	
Fiber	g	5.00	2.000	2	1.42	22.68	
Ash	g	5.50	2.500	2	1.56	24.95	
MINERALS:							
Calcium	mg	149			42	677	
Iron	mg	14.22			4.04	64.52	
Magnesium	mg	338			96	1,535	
Phosphorus	mg	757			215	3,433	
Potassium	mg	397			113	1,800	
Sodium	mg	39			11	175	
Zinc	mg	10.00			2.84	45.38	
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	2.516			0.715	11.413	
Riboflavin	mg	0.269			0.076	1.220	
Niacin	mg	12.533			3.559	56.850	
Pantothenic acid	mg	2.745			0.780	12.451	
Vitamin B ₆	mg	0.142			0.040	0.644	
Folacin	mcg	28.8			8.2	130.8	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	6			2	29	
	{ IU	64			18	292	
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.201			0.057	0.912	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.004			0.001	0.018	
16:0	g	0.128			0.036	0.581	
18:0	g	0.060			0.017	0.272	
Monounsaturated, total	g	0.543			0.154	2.463	
16:1	g	0.004			0.001	0.018	
18:1	g	0.536			0.152	2.431	
20:1	g	0.002			0.001	0.009	
22:1	g						
Polyunsaturated, total	g	0.630			0.179	2.858	
18:2	g	0.618			0.176	2.803	
18:3	g	0.011			0.003	0.050	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	1.097			0.312	4.976	
Threonine	g	2.081			0.591	9.439	
Isoleucine	g	2.157			0.613	9.784	
Leucine	g	3.841			1.091	17.423	
Lysine	g	1.608			0.457	7.294	
Methionine	g	1.656			0.470	7.512	
Cystine	g	1.012			0.287	4.590	
Phenylalanine	g	2.658			0.755	12.057	
Tyrosine	g	2.100			0.596	9.526	
Valine	g	2.800			0.795	12.701	
Arginine	g	7.436			2.112	33.730	
Histidine	g	1.476			0.419	6.695	
Alanine	g	2.620			0.744	11.884	
Aspartic acid	g	4.654			1.322	21.111	
Glutamic acid	g	11.182			3.176	50.722	
Glycine	g	3.434			0.975	15.577	
Proline	g	2.289			0.650	10.383	
Serine	g	2.734			0.776	12.401	

¹ Product made from sesame seed kernels.

Sesame Meal, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	5.00	1	1.42		22.68	
Food energy	{ kcal	567	161		2,570		
	{ kJ	2,371	673		10,753		
Protein (N X 5.30)	g	16.96	1	4.82		76.93	
Total lipid (fat)	g	48.00	1	13.63		217.73	
Carbohydrate, total	g	26.04		7.40		118.12	
Fiber	g	4.00	1	1.14		18.14	
Ash	g	4.00	1	1.14		18.14	
MINERALS:							
Calcium	mg	153	43		692		
Iron	mg	14.55	4.13		65.98		
Magnesium	mg	346	98		1,569		
Phosphorus	mg	774	220		3,511		
Potassium	mg	406	115		1,841		
Sodium	mg	39	11		179		
Zinc	mg	10.23	2.91		46.40		
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0	0.0		0.0		
Thiamin	mg	2.573	0.731		11.671		
Riboflavin	mg	0.275	0.078		1.247		
Niacin	mg	12.816	3.640		58.133		
Pantothenic acid	mg	2.807	0.797		12.733		
Vitamin B ₆	mg	0.146	0.041		0.662		
Folacin	mcg	29.5	8.4		133.8		
Vitamin B ₁₂	mcg	0	0		0		
Vitamin A	{ RE	7	2		30		
	{ IU	66	19		299		
LIPIDS:							
Fatty acids:							
Saturated, total	g	6.722	1.909		30.491		
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.120	0.034		0.544		
16:0	g	4.292	1.219		19.469		
18:0	g	2.019	0.573		9.158		
Monounsaturated, total	g	18.127	5.148		82.224		
16:1	g	0.144	0.041		0.653		
18:1	g	17.897	5.083		81.181		
20:1	g	0.067	0.019		0.304		
22:1	g						
Polynsaturated, total	g	21.039	5.975		95.433		
18:2	g	20.654	5.866		93.687		
18:3	g	0.363	0.103		1.647		
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0	0		0		
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.371	0.105		1.683		
Threonine	g	0.704	0.200		3.193		
Isoleucine	g	0.730	0.207		3.311		
Leucine	g	1.299	0.369		5.892		
Lysine	g	0.544	0.154		2.468		
Methionine	g	0.560	0.159		2.540		
Cystine	g	0.342	0.097		1.551		
Phenylalanine	g	0.899	0.255		4.078		
Tyrosine	g	0.710	0.202		3.221		
Valine	g	0.947	0.269		4.296		
Arginine	g	2.515	0.714		11.408		
Histidine	g	0.499	0.142		2.263		
Alanine	g	0.886	0.252		4.019		
Aspartic acid	g	1.574	0.447		7.140		
Glutamic acid	g	3.782	1.074		17.155		
Glycine	g	1.162	0.330		5.271		
Proline	g	0.774	0.220		3.511		
Serine	g	0.925	0.263		4.196		

¹ Product made from sesame seed kernels.

SEEDS

Sisymbrium sp. Seeds, whole, dried*Sisymbrium* spp.

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g	1 c = 74 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	6.10	1	1.73	4.51	27.67	
Food energy	{ kcal	318		90	235	1,441	
	{ kJ	1,329		378	984	6,030	
Protein (N X 5.30)	g	12.14		3.45	8.98	55.05	
Total lipid (fat)	g	4.60	1	1.31	3.40	20.87	
Carbohydrate, total	g	58.26		16.55	43.11	264.28	
Fiber	g	29.70	1	8.43	21.98	134.72	
Ash ¹	g	18.90	1	5.37	13.99	85.73	
MINERALS:							
Calcium	mg	1,633	1	464	1,208	7,407	
Iron	mg	0.11	1	0.03	0.08	0.50	
Magnesium	mg	314	1	89	232	1,424	
Phosphorus	mg	6	1	2	5	28	
Potassium	mg	2,130	1	605	1,576	9,662	
Sodium	mg	92	1	26	68	417	
Zinc	mg	0.30	1	0.09	0.22	1.36	
Copper	mg	0.110	1	0.031	0.081	0.499	
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.902		0.256	0.667	4.091	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g						
16:0	g	0.616	1	0.175	0.456	2.794	
18:0	g	0.132	1	0.037	0.098	0.599	
Monounsaturated, total	g	1.486		0.422	1.100	6.740	
16:1	g	0.035	1	0.010	0.026	0.159	
18:1	g	0.836	1	0.237	0.619	3.792	
20:1	g	0.352	1	0.100	0.260	1.597	
22:1	g	0.264	1	0.075	0.195	1.198	
Polyunsaturated, total	g	2.023		0.575	1.497	9.176	
18:2	g	0.572	1	0.162	0.423	2.595	
18:3	g	1.451	1	0.412	1.074	6.582	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.689	1	0.196	0.510	3.125	
Threonine	g	0.650	1	0.185	0.481	2.948	
Isoleucine	g	1.234	1	0.350	0.913	5.597	
Leucine	g	0.806	1	0.229	0.596	3.656	
Lysine	g	0.311	1	0.088	0.230	1.411	
Methionine	g						
Cystine	g						
Phenylalanine	g	0.584	1	0.166	0.432	2.649	
Tyrosine	g	0.419	1	0.119	0.310	1.901	
Valine	g	0.705	1	0.200	0.522	3.198	
Arginine	g	0.799	1	0.227	0.591	3.624	
Histidine	g	0.325	1	0.092	0.241	1.474	
Alanine	g	0.685	1	0.195	0.507	3.107	
Aspartic acid	g	1.484	1	0.421	1.098	6.731	
Glutamic acid	g	1.770	1	0.503	1.310	8.029	
Glycine	g	0.698	1	0.198	0.517	3.166	
Proline	g	0.673	1	0.191	0.498	3.053	
Serine	g	0.483	1	0.137	0.357	2.191	

¹ Silica present in sample.

Sunflower Seed Kernels, dried¹
Helianthus annuus

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Refuse: Hulls 46%	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 144 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	5.36	0.341	21	1.52	7.72	
Food energy	{ kcal	570		162	821	1,397	
	{ kJ	2,386		678	3,436	5,844	
Protein (N X 5.30)	g	22.78	0.749	21	6.47	32.80	
Total lipid (fat)	g	49.57	0.788	21	14.08	71.39	
Carbohydrate, total	g	18.76			5.33	27.02	
Fiber	g	4.16	0.405	11	1.18	5.99	
Ash	g	3.53	0.212	9	1.00	5.08	
MINERALS:							
Calcium	mg	116	24.266	2	33	168	
Iron	mg	6.77	0.628	2	1.92	9.75	
Magnesium	mg	354		1	100	509	
Phosphorus	mg	705	12.085	2	200	1,015	
Potassium	mg	689			196	992	
Sodium	mg	3		1	1	4	
Zinc	mg	5.06	0.417	2	1.44	7.29	
Copper	mg	1.752	0.198	2	0.498	2.523	
Manganese	mg	2.020		1	0.574	2.909	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	2.290		1	0.650	3.298	
Riboflavin	mg	0.250		1	0.071	0.360	
Niacin	mg	4.500		1	1.278	6.480	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE	5		1	7	12	
	{ IU	50		14	72	122	
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.195			1.475	7.481	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.051		14	0.014	0.073	
16:0	g	2.795		169	0.794	4.025	
18:0	g	2.202		169	0.625	3.171	
Monounsaturated, total	g	9.462			2.687	13.625	
16:1	g	0.049		15	0.014	0.071	
18:1	g	9.356		169	2.657	13.473	
20:1	g	0.048		10	0.014	0.069	
22:1	g						
Polyunsaturated, total	g	32.735			9.297	47.138	
18:2	g	32.632		169	9.267	46.990	
18:3	g	0.069		12	0.020	0.099	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg	534		152	769	1,308	
AMINO ACIDS:							
Tryptophan	g	0.348		25	0.099	0.501	
Threonine	g	0.928		41	0.264	1.336	
Isoleucine	g	1.139		41	0.323	1.640	
Leucine	g	1.659		41	0.471	2.389	
Lysine	g	0.937		44	0.266	1.349	
Methionine	g	0.494		40	0.140	0.711	
Cystine	g	0.451		26	0.128	0.649	
Phenylalanine	g	1.169		40	0.332	1.683	
Tyrosine	g	0.666		31	0.189	0.959	
Valine	g	1.315		41	0.373	1.894	
Arginine	g	2.403		35	0.682	3.460	
Histidine	g	0.632		35	0.179	0.910	
Alanine	g	1.117		26	0.317	1.608	
Aspartic acid	g	2.446		26	0.695	3.522	
Glutamic acid	g	5.579		26	1.584	8.034	
Glycine	g	1.461		26	0.415	2.104	
Proline	g	1.182		25	0.336	1.702	
Serine	g	1.075		26	0.305	1.548	

¹ Confectionery type.

Sunflower Seed Kernels, dry roasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 128 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.20	1	0.34	1.54	5.44	
Food energy	{ kcal	582		165	745	2,639	
	kJ	2,435		691	3,116	11,043	
Protein (N X 5.30)	g	19.33	1	5.49	24.75	87.70	
Total lipid (fat)	g	49.80	1	14.14	63.74	225.89	
Carbohydrate, total	g	24.07		6.83	30.80	109.16	
Fiber	g	1.81		0.51	2.32	8.21	
Ash	g	5.60	1	1.59	7.17	25.40	
MINERALS:							
Calcium	mg	70	1	20	90	319	
Iron	mg	3.80	1	1.08	4.87	17.25	
Magnesium	mg	129		37	165	584	
Phosphorus	mg	1,155		328	1,479	5,241	
Potassium	mg	850	1	241	1,088	3,856	
Sodium ²	mg	3		1	4	15	
Zinc	mg	5.29		1.50	6.77	23.98	
Copper	mg	1.830		0.520	2.342	8.301	
Manganese	mg	2.110		0.599	2.701	9.571	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg	0.106	1	0.030	0.136	0.481	
Riboflavin	mg	0.246	1	0.070	0.315	1.116	
Niacin	mg	7.042	1	2.000	9.014	31.943	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.219		1.482	6.680	23.673	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.051		0.014	0.065	0.231	
16:0	g	2.808		0.797	3.594	12.737	
18:0	g	2.212		0.628	2.831	10.034	
Monounsaturated, total	g	9.505		2.699	12.166	43.115	
16:1	g	0.049		0.014	0.063	0.222	
18:1	g	9.399		2.669	12.031	42.634	
20:1	g	0.048		0.014	0.061	0.218	
22:1	g						
Polysaturated, total	g	32.884		9.339	42.092	149.162	
18:2	g	32.782		9.310	41.961	148.699	
18:3	g	0.069		0.020	0.088	0.313	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.295		0.084	0.378	1.338	
Threonine	g	0.788		0.224	1.009	3.574	
Isoleucine	g	0.967		0.275	1.238	4.386	
Leucine	g	1.408		0.400	1.802	6.387	
Lysine	g	0.795		0.226	1.018	3.606	
Methionine	g	0.420		0.119	0.538	1.905	
Cystine	g	0.383		0.109	0.490	1.737	
Phenylalanine	g	0.992		0.282	1.270	4.500	
Tyrosine	g	0.565		0.160	0.723	2.563	
Valine	g	1.116		0.317	1.428	5.062	
Arginine	g	2.039		0.579	2.610	9.249	
Histidine	g	0.536		0.152	0.686	2.431	
Alanine	g	0.948		0.269	1.213	4.300	
Aspartic acid	g	2.076		0.590	2.657	9.417	
Glutamic acid	g	4.735		1.345	6.061	21.478	
Glycine	g	1.240		0.352	1.587	5.625	
Proline	g	1.003		0.285	1.284	4.550	
Serine	g	0.912		0.259	1.167	4.137	

¹ Confectionery type.² Value based on data for product without added salt. Product with added salt contains 780 mg sodium per 100 g.

Sunflower Seed Kernels, oil roasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0
	Mean	Standard error	Number of samples	Approximate measure and weight	1 oz = 28.4 g	
	A	B	C	D	E	F	G
PROXIMATE:						
Water	g	2.60	1	0.74	3.51	11.79
Food energy	{ kcal	615		175	830	2,789
	kJ	2,573		731	3,473	11,670
Protein (N X 5.30)	g	21.36	3.392	6.07	28.83	96.88
Total lipid (fat)	g	57.45	3.350	16.32	77.56	260.59
Carbohydrate, total	g	14.73		4.18	19.88	66.80
Fiber	g	1.79	0.515	2	0.51	2.41
Ash	g	3.87	0.335	2	1.10	5.22
MINERALS:						
Calcium	mg	56	1	16	76	254
Iron	mg	6.70	1	1.90	9.05	30.39
Magnesium	mg	127	1	36	171	576
Phosphorus	mg	1,139	1	323	1,538	5,167
Potassium	mg	483	1	137	652	2,191
Sodium ²	mg	3		1	4	14
Zinc	mg	5.21		1.48	7.04	23.64
Copper	mg	1.804		0.512	2.435	8.183
Manganese	mg	2.080		0.591	2.808	9.435
VITAMINS:						
Ascorbic acid	mg	1.4	1	0.4	1.9	6.4
Thiamin	mg	0.320	1	0.091	0.432	1.452
Riboflavin	mg	0.280	1	0.080	0.378	1.270
Niacin	mg	4.130	1	1.173	5.576	18.734
Pantothenic acid	mg					
Vitamin B ₆	mg					
Folacin	mcg	234.0	1	66.5	315.9	1,061.4
Vitamin B ₁₂	mcg	0		0	0	0
Vitamin A	{ RE					
	IU					
LIPIDS:						
Fatty acids:						
Saturated, total	g	6.021		1.710	8.128	27.311
4:0	g					
6:0	g					
8:0	g					
10:0	g					
12:0	g					
14:0	g	0.059		0.017	0.080	0.268
16:0	g	3.239		0.920	4.373	14.692
18:0	g	2.551		0.724	3.444	11.571
Monounsaturated, total	g	10.965		3.114	14.803	49.737
16:1	g	0.057		0.016	0.077	0.259
18:1	g	10.843		3.079	14.638	49.184
20:1	g	0.055		0.016	0.074	0.249
22:1	g					
Polyunsaturated, total	g	37.936		10.774	51.214	172.078
18:2	g	37.818		10.740	51.054	171.542
18:3	g	0.080		0.023	0.108	0.363
18:4	g					
20:4	g					
20:5	g					
22:5	g					
22:6	g					
Cholesterol	mg	0		0	0	0
Phytosterols	mg					
AMINO ACIDS:						
Tryptophan	g	0.326		0.093	0.440	1.479
Threonine	g	0.870		0.247	1.175	3.946
Isoleucine	g	1.068		0.303	1.442	4.844
Leucine	g	1.556		0.442	2.101	7.058
Lysine	g	0.879		0.250	1.187	3.987
Methionine	g	0.463		0.131	0.625	2.100
Cystine	g	0.423		0.120	0.571	1.919
Phenylalanine	g	1.096		0.311	1.480	4.971
Tyrosine	g	0.625		0.178	0.844	2.836
Valine	g	1.233		0.350	1.665	5.593
Arginine	g	2.253		0.640	3.042	10.220
Histidine	g	0.592		0.168	0.799	2.685
Alanine	g	1.048		0.298	1.415	4.754
Aspartic acid	g	2.293		0.651	3.096	10.401
Glutamic acid	g	5.231		1.486	7.062	23.728
Glycine	g	1.370		0.389	1.850	6.214
Proline	g	1.108		0.315	1.496	5.026
Serine	g	1.008		0.286	1.361	4.572

¹ Confectionery type.² Value based on data for product without added salt. Product with added salt contains 603 mg sodium per 100 g.

Sunflower Seed Kernels, toasted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 oz = 28.4 g	1 c = 134 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.00	1	0.28	1.34	4.54	
Food energy	{ kcal	61.9		176	829	2,807	
	kJ	2,590		735	3,470	11,746	
Protein (N X 5.30)	g	17.21	1	4.89	23.07	78.08	
Total lipid (fat)	g	56.80	1	16.13	76.11	257.64	
Carbohydrate, total	g	20.59		5.85	27.59	93.38	
Fiber	g	1.81		0.52	2.43	8.23	
Ash	g	4.40	1	1.25	5.90	19.96	
MINERALS:							
Calcium	mg	57		16	76	258	
Iron	mg	6.81		1.93	9.13	30.89	
Magnesium	mg	129		37	173	586	
Phosphorus	mg	1,158		329	1,551	5,251	
Potassium	mg	491		139	658	2,227	
Sodium ²	mg	3		1	4	15	
Zinc	mg	5.30		1.50	7.10	24.03	
Copper	mg	1.834		0.521	2.458	8.319	
Manganese	mg	2.114		0.600	2.833	9.589	
VITAMINS:							
Ascorbic acid	mg						
Thiamin	mg						
Riboflavin	mg						
Niacin	mg						
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0		0	0	0	
Vitamin A	{ RE						
	IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.953		1.691	7.977	27.003	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.058		0.016	0.078	0.263	
16:0	g	3.202		0.909	4.291	14.524	
18:0	g	2.522		0.716	3.379	11.440	
Monounsaturated, total	g	10.841		3.079	14.527	49.175	
16:1	g	0.056		0.016	0.075	0.254	
18:1	g	10.720		3.044	14.365	48.626	
20:1	g	0.055		0.016	0.074	0.249	
22:1	g						
Polyunsaturated, total	g	37.507		10.652	50.259	170.132	
18:2	g	37.390		10.619	50.103	169.601	
18:3	g	0.079		0.022	0.106	0.358	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0		0	0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.263		0.075	0.352	1.193	
Threonine	g	0.702		0.199	0.941	3.184	
Isoleucine	g	0.861		0.245	1.154	3.905	
Leucine	g	1.254		0.356	1.680	5.688	
Lysine	g	0.708		0.201	0.949	3.211	
Methionine	g	0.374		0.106	0.501	1.696	
Cystine	g	0.341		0.097	0.457	1.547	
Phenylalanine	g	0.883		0.251	1.183	4.005	
Tyrosine	g	0.503		0.143	0.674	2.282	
Valine	g	0.994		0.282	1.332	4.509	
Arginine	g	1.816		0.516	2.433	8.237	
Histidine	g	0.477		0.135	0.639	2.164	
Alanine	g	0.844		0.240	1.131	3.828	
Aspartic acid	g	1.848		0.525	2.476	8.383	
Glutamic acid	g	4.216		1.197	5.649	19.124	
Glycine	g	1.104		0.314	1.479	5.008	
Proline	g	0.893		0.254	1.197	4.051	
Serine	g	0.812		0.231	1.088	3.683	

¹ Confectionery type.² Value based on data for product without added salt. Product with added salt contains 613 mg sodium per 100 g.

Sunflower Seed Butter

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased	
	Mean	Standard error	Number of samples	Approximate measure and weight		Refuse: 0	
				1 oz = 28.4 g	1 tbsp = 16 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	1.23	0.227	6	0.35	0.20	5.59
Food energy	{ kcal	579		165	93	2,628	
	{ kJ	2,424		688	388	10,995	
Protein (N X 5.30)	g	19.66	0.404	6	5.58	3.15	89.19
Total lipid (fat)	g	47.73	1.726	6	13.56	7.64	216.52
Carbohydrate, total	g	27.42			7.79	4.39	124.38
Fiber ¹	g	1.50		1	0.43	0.24	6.80
Ash	g	3.95	0.148	6	1.12	0.63	17.92
MINERALS:							
Calcium	mg	122			35	19	552
Iron	mg	4.75		1	1.35	0.76	21.55
Magnesium	mg	369			105	59	1,676
Phosphorus	mg	736			209	118	3,339
Potassium	mg	72			20	12	326
Sodium ²	mg	3			1	1	15
Zinc	mg	5.29			1.50	0.85	23.98
Copper	mg	1.830			0.520	0.293	8.301
Manganese	mg	2.110			0.599	0.338	9.571
VITAMINS:							
Ascorbic acid	mg	2.7		1	0.8	0.4	12.2
Thiamin	mg						
Riboflavin	mg						
Niacin	mg	5.320		1	1.511	0.851	24.132
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	0
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	5.002			1.421	0.800	22.689
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.049			0.014	0.008	0.222
16:0	g	2.691			0.764	0.431	12.206
18:0	g	2.120			0.602	0.339	9.616
Monounsaturated, total	g	9.111			2.588	1.458	41.327
16:1	g	0.047			0.013	0.008	0.213
18:1	g	9.009			2.559	1.441	40.865
20:1	g	0.046			0.013	0.007	0.209
22:1	g						
Polyunsaturated, total	g	31.520			8.952	5.043	142.975
18:2	g	31.421			8.924	5.027	142.526
18:3	g	0.066			0.019	0.011	0.299
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	0
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.301			0.085	0.048	1.365
Threonine	g	0.801			0.227	0.128	3.633
Isoleucine	g	0.983			0.279	0.157	4.459
Leucine	g	1.432			0.407	0.229	6.496
Lysine	g	0.809			0.230	0.129	3.670
Methionine	g	0.427			0.121	0.068	1.937
Cystine	g	0.390			0.111	0.062	1.769
Phenylalanine	g	1.009			0.287	0.161	4.577
Tyrosine	g	0.575			0.163	0.092	2.608
Valine	g	1.135			0.322	0.182	5.148
Arginine	g	2.074			0.589	0.332	9.408
Histidine	g	0.545			0.155	0.087	2.472
Alanine	g	0.965			0.274	0.154	4.377
Aspartic acid	g	2.111			0.600	0.338	9.575
Glutamic acid	g	4.816			1.368	0.771	21.845
Glycine	g	1.261			0.358	0.202	5.720
Proline	g	1.020			0.290	0.163	4.627
Serine	g	0.928			0.264	0.148	4.209

¹ Insoluble dietary fiber as determined by the neutral detergent fiber method = 4.92 g per 100 g.² Value based on data for product without added salt. Product with added salt contains 520 mg sodium per 100 g.

Sunflower Seed Flour, partially defatted¹

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: 0	
	Mean	Standard error	Number of samples	Approximate measure and weight			
				1 tbsp = 5 g	1 c = 80 g		
A	B	C	D	E	F	G	
PROXIMATE:							
Water	g	7.47	0.717	11	0.37 16	5.97 261	
Food energy	{ kcal	326			68	1,479 1,091	
Food energy	{ kJ	1,364				6,188	
Protein (N X 5.30)	g	48.06	1.439	11	2.40	38.45 218.00	
Total lipid (fat)	g	1.61	0.188	11	0.08	1.28 7.28	
Carbohydrate, total	g	35.83			1.79	28.67 162.54	
Fiber	g	5.19	0.468	10	0.26	4.15 23.54	
Ash	g	7.04	0.213	8	0.35	5.63 31.91	
MINERALS:							
Calcium	mg	114			6	91 5.30	
Iron	mg	6.62			0.33	516 30.04	
Magnesium	mg	346			17	277 551	
Phosphorus	mg	689			34	3,126	
Potassium	mg	67			3	54 306	
Sodium	mg	3			0	2 14	
Zinc	mg	4.95			0.25	3.96 22.45	
Copper	mg	1.713			0.086	1.370 7.770	
Manganese	mg	1.975			0.099	1.580 8.959	
VITAMINS:							
Ascorbic acid	mg				0.159	2.550 14.456	
Thiamin	mg	3.187	0.121	3			
Riboflavin	mg				0.366	5.850 33.172	
Niacin	mg	7.313	0.293	3			
Pantothenic acid	mg	6.595	0.320	3	0.330	5.276 29.915	
Vitamin B ₆	mg						
Folacin	mcg						
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE						
	{ IU						
LIPIDS:							
Fatty acids:							
Saturated, total	g	0.138			0.007	0.110 0.626	
4:0	g						
6:0	g						
8:0	g						
10:0	g						
12:0	g						
14:0	g	0.001			0.000	0.001 0.005	
16:0	g	0.074			0.004	0.059 0.336	
18:0	g	0.059			0.003	0.047 0.268	
Monounsaturated, total	g	0.252			0.013	0.202 1.143	
16:1	g	0.001			0.000	0.001 0.005	
18:1	g	0.249			0.012	0.199 1.129	
20:1	g	0.001			0.000	0.001 0.005	
22:1	g						
Polyunsaturated, total	g	0.870			0.044	0.696 3.946	
18:2	g	0.868			0.043	0.694 3.937	
18:3	g	0.002			0.000	0.002 0.009	
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.735			0.037	0.588 3.334	
Threonine	g	1.959			0.098	1.567 8.886	
Isoleucine	g	2.403			0.120	1.922 10.900	
Leucine	g	3.500			0.175	2.800 15.876	
Lysine	g	1.977			0.099	1.582 8.968	
Methionine	g	1.043			0.052	0.834 4.731	
Cystine	g	0.952			0.048	0.762 4.318	
Phenylalanine	g	2.466			0.123	1.973 11.186	
Tyrosine	g	1.406			0.070	1.125 6.378	
Valine	g	2.775			0.139	2.220 12.587	
Arginine	g	5.069			0.253	4.055 22.993	
Histidine	g	1.333			0.067	1.066 6.046	
Alanine	g	2.358			0.118	1.886 10.696	
Aspartic acid	g	5.160			0.258	4.128 23.406	
Glutamic acid	g	11.770			0.589	9.416 53.389	
Glycine	g	3.083			0.154	2.466 13.984	
Proline	g	2.494			0.125	1.995 11.313	
Serine	g	2.267			0.113	1.814 10.283	

¹ Product made from confectionery kernels.

Watermelon Seed Kernels, dried
Citrullus lanatus

Nutrients and units	Amount in 100 grams, edible portion			Amount in edible portion of common measures of food		Amount in edible portion of 1 pound of food as purchased Refuse: Hard seed coat 63%	
	Mean A	Standard error B	Number of samples C	Approximate measure and weight			
				1 oz = 28.4 g ¹ E	1 c = 108 g F		
PROXIMATE:							
Water	g	5.05	0.390	18	1.43 158	5.45 602	
Food energy	{ kcal kJ	557 2,331			662 2,517	8.47 935 3,911	
Protein (N X 5.30)	g	28.33	0.558	1b	8.05 13.45	30.60 51.15	
Total lipid (fat)	g	47.37	1.481	15	4.35	47.54 79.48	
Carbohydrate, total	g	15.31			0.86	16.54 25.69	
Fiber	g	3.04	0.599	6	1.12	3.29 5.11	
Ash	g	3.94	0.149	10		4.26 6.61	
MINERALS:							
Calcium	mg	54	7.659	10	15	59 7.86	
Iron	mg	7.28	0.532	9	2.07	91 12.22	
Magnesium	mg	515	24.437	6	146	864	
Phosphorus	mg	755	37.018	10	215	1,268	
Potassium	mg	648	15.448	6	184	700 1,087	
Sodium	mg	99	88.049	6	28	107 166	
Zinc	mg						
Copper	mg						
Manganese	mg						
VITAMINS:							
Ascorbic acid	mg	0.0		1	0.0	0.0	
Thiamin	mg	0.190	0.045	3	0.054	0.205 0.319	
Riboflavin	mg	0.145	0.005	2	0.041	0.157 0.243	
Niacin	mg	3.550	2.150	2	1.008	3.834 5.957	
Pantothenic acid	mg						
Vitamin B ₆	mg						
Folacin	mcg	57.9	0.548	3	16.4	62.6 97.2	
Vitamin B ₁₂	mcg	0			0	0	
Vitamin A	{ RE IU	0		1	0	0	
POLYPSATURATED, total	g	28.094		3	7.979	30.342 30.342	
18:2	g	28.094			7.979	47.142 47.142	
18:3	g						
18:4	g						
20:4	g						
20:5	g						
22:5	g						
22:6	g						
Cholesterol	mg	0			0	0	
Phytosterols	mg						
AMINO ACIDS:							
Tryptophan	g	0.390		1	0.111	0.421 0.654	
Threonine	g	1.112		3	0.316	1.201 1.866	
Isoleucine	g	1.342		3	0.381	1.449 2.252	
Leucine	g	2.149		3	0.610	2.321 3.606	
Lysine	g	0.887		3	0.252	0.958 1.488	
Methionine	g	0.834		3	0.237	0.901 1.399	
Cystine	g	0.438		2	0.124	0.473 0.735	
Phenylalanine	g	2.031		3	0.577	2.193 3.408	
Tyrosine	g	1.016		3	0.289	1.097 1.705	
Valine	g	1.556		3	0.442	1.680 2.611	
Arginine	g	4.897		3	1.391	5.289 8.217	
Histidine	g	0.775		3	0.220	0.837 1.300	
Alanine	g	1.492		3	0.424	1.611 2.504	
Aspartic acid	g	2.764		3	0.785	2.985 4.638	
Glutamic acid	g	5.699		3	1.619	6.155 9.563	
Glycine	g	1.663		3	0.472	1.796 2.791	
Proline	g	1.251		3	0.355	1.351 2.099	
Serine	g	1.508		3	0.428	1.629 2.530	

¹ 1 oz = approx. 142 small kernels (5/16 x 3/16 in) or 95 large kernels (5/16 x 4/16 in).